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ABSTRACT

This document contains the proceedings of the January 1964 Annual Meeting of the National College Physical Education Association for Men (NEPEAM). In addition to the President's address and a speech on physical education as an academic discipline, the Proceedings contain speeches on the following topics: (1) intramural athletics, (2) research, (3) intercollegiate athletics, (4) history of sport, (5) teacher education, and (6) basic instruction. Among the research topics discussed are the effects of inhalation of smog upon cardiorespiratory responses, factors associated with major knee injuries in varsity football, and the relationship between written test scores and performance skills ratings in sports. Also included are the President's report, financial reports, minutes form the previous Meeting, and reports from the Standing Committees. A membership list and an author index of articles from the proceedings of the Association from 1940 to 1963 complete the document. (CD)

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president's address

THIS MATTER OF PROMOTION[1]

KARL W. BOOKWALTER
President, NCPEAM

To promote means "to exalt in station, rank, or honor; to elevate; raise; prefer; advance . . . to contribute to the growth, enlargement, or prosperity of . . . something."

Promotion appears to be of two levels: the broader should be the promotion of society and the profession; the narrower would be the promotion of the person. I would like to suggest that we should be promoting the person who promotes the profession. Promotion should improve not only the faculty person's status but also that of the program in which he is involved.

Promotion of one's self, irrespective of the profession, may be compared to looking through binoculars from the wrong end—the big things are overlooked, and even the little things are diminished.

A profession is distinguished from a trade or semiskilled labor by several characteristics. The essential difference is that a profession is a scientific endeavor. (A science, in turn, is dependent upon research.) A trade is a skilled occupation and its workers are artisans at best and technicians at least. These statements in no way attempt to indicate the worth of these endeavors, only the requirements for them. In order better to delineate the difference between a true profession and a trade or technical work, it is necessary to enumerate and briefly describe some commonly accepted characteristics of a profession.

Characteristics of a Profession

A Service Motive. Professional people are dedicated to particular service motives: first, the improvement of society and second, the betterment of their profession. While personal returns are important and monetary gain will tend to follow sound professional endeavors, the economic goal is tertiary in determining success. When profit overshadows service, laymen lose respect for the profession. Unfortunately certain professional bulletins of research in education are overwhelmingly concerned with salaries or fringe benefits rather than with methods or results.

A Scientific Basis. The principles and practices of a profession are based upon scientific evidence, which is usually interdisciplinary in scope. An organized body of facts related to professional problems provides the laws and principles under which the professional works. Here again studies of hundreds of credentials of so-called advanced students reveal in many the marked absence of or ineptitude for scientific research.

Extended Preparation. The professional must properly interpret and utilize the plethora of scientific facts and skills of his field. Many years—frequently seven or more—of higher education are usually necessary to attain the top rungs in a profession, to make a real contribution to it and to society, and, in addition, to be a cultured citizen and a person in one's own right.

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[1] Bibliography and charts may be obtained from the author.

We are in the largest profession, education; which presently involves over 2,125,000 workers at all levels. The college alone involves over 350,000 professionals. But, are we the best? Medicine and theology require seven years of advanced preparation. Dentistry, law, and social work require six years. Public school teaching requires a minimum of four years and five years are coming to be expected. Some college teachers come in after only four years advanced preparation. This should not be permitted.

Special Skills. Technical and intellectual skills highly specific to a particular field distinguish one profession or trade from another. In spite of interdisciplinary requirements and supporting values, these unique and disparate abilities are at the heart of the challenge which results in the choice of one profession before another. Many professions have subdivisions which in themselves require a lifetime before reasonable proficiency is attained. Medicine, law, engineering, and education are obvious examples.

Formal Education or Degree Attainment. It is obvious that not any education and training will provide the needed knowledges and skills for a particular profession, as these usually require a specific degree. The baccalaureate degree is rapidly becoming inadequate and one or more graduate degrees are required or available for the truly professional individual.

Licensure or Certification. The professions themselves have been largely responsible for the determination of degree or license standards and requirements. In medicine or law, the profession usually stipulates the requirements for admission to practice. With regard to teaching, the state departments of public instruction or the state teacher training institutions set the standards.

Autonomy of Judgment. This is granted and protected upon successful completion of the extended preparation and the attainment of appropriate degrees and/or licenses. With this authority also comes personal responsibility to practice in accordance with professional standards. Violation of professional standards in law or medicine can be cause for disenfranchisement.

Professional Organizations. For the continued growth, inspiration, and sociability of their members, professions have organizations—local, state, regional, national, and even international in scope. Conventions, conferences, committee, and group work enable members to keep up with their fields and to share experiences with one another. Needed standards, study, and research can be implemented and promoted. The organization makes it possible for individuals to progress in a way impossible if they were alone. However, membership is not enough. Participation and leadership are indispensable and each professional worker should contribute according to his ability. Our own National College Physical Education Association for Men should be a leader in our field. We are scarcely exerting a fraction of our potential influence. I would urge that we do more than meet and discuss problems.

Body of Literature. Monthly, quarterly, and/or annual publications are a natural and necessary outgrowth of active professional organizations sharing their experiences. From the profession itself must come the articles, books, theses, or dissertations needed in the formal education and inservice education of its workers. The quality and quantity of professional publications are an index to the vitality and soundness of a profession. Their use and publication are an indication of the professional stature of the individual workers. We should join actively with the National Association for Physical Education of College Women and carry our share of the load in making *Quest* the most valuable single contribution to higher education in our field.

Code of Ethics. Finally, the ethical standards and practices which govern the professional worker's contacts with fellow workers, his profession as a whole, and the people he serves are the basis for the public evaluation of one's profession. Here again, mature and capable professional leaders must formulate a code of ethics; the acceptance of the code must be obtained from the profession at large; and, finally, a means of assuring compliance with the code must be set up.

There is evidence that the physical education profession is near the bottom of the recognized professions; for example, in 1950, when the index of teachers was taken as 100, physicians had an index of 404.1, lawyers of 273.7, and dentists of 243.8.

The Wheel of Professional Progress

To explain lucidly and meaningfully why progress is indispensable to a profession, a few definitions will be given and their relationships shown.

Philosophy determines that which one attends to, believes, and does. Philosophy is a logical system of values, principles, or relationships, based upon a love of knowledge and a wealth of facts. One's philosophy affects the recognition of problems and one's approach to their solution. A philosophy does not exist in a vacuum: without knowledge, opinions and beliefs are but biases without basis.

Research is a careful, systematic, and unbiased investigation of specific hypotheses or problems by means of selected, organized, and analyzed data or facts, with a view to formulating verifiable conclusions or generalizations. As previously indicated, one's philosophy will dictate what one will do research about and how one will accomplish it. Research, when properly done, will add to or modify one's philosophy but its essential function is to extend the boundaries of science.

Science is an organized system of related facts or knowledge accurately or "scientifically" determined as a result of survey, measurement, experiment, or other such research methods. Out of the analysis and synthesis of existing knowledge, in light of a sound philosophy, come means, laws, and principles which extend man's intelligence and give him control over himself and his environment.

Scholarship is the depth and breadth of education and experience which enables one to select, organize, synthesize, and interpret the existing body of knowledge in order to render that knowledge more readily understandable and functional. This understanding and functionality of knowledge improves one's philosophy and reveals gaps and problems which make one's philosophy more sound and at the same time more cautious.

Thus the cycle is accelerated and advanced and a true profession has been started and given vitality. Better scholarship provides a sounder philosophy, which in turn focuses curiosity upon satisfactory problems for research. The solution of these problems adds to the wealth of scientific knowledge which scholarship clarifies, analyzes, and synthesizes to validate one's philosophy and so on. The wheel of professional progress turns.

But what is the light, heat, and power which turns this wheel? It is the dedicated professional advancement by and of thousands of individuals. We must turn to our leaders for this progress. The effects of the ignorance, bias, and bigotry of a handful of leaders of a few states have recently resulted in a national calamity. Breadth of view and depth of knowledge are prerequisites for leaders in our fields as well. We never know when we, too, may be called upon to accept responsibility, to make vital decisions. At times, we seem to lack adequate leadership.

Criteria for Personal Promotions

If higher education is to be truly higher than public education, promotion must be based upon more than certification, tenure, and degrees. To these prerequisites for promotion in public schools must fearlessly be added the criterion of worth.

About 60 intensive hours spent on the university promotions committee reading personal professional biographies and debating the relative merits of well over 100 instructors, assistant professors, associate professors, and professors has recently given me a rich insight into what it takes to get ahead in college. Peculiarly enough it doesn't take certification, as such: nor is the doctorate the *sine qua non.*

Promotion is not a prerogative, it is a privilege to be earned. There are two sides to the coin of promotion: the head of service, and the tail of advancement. Hopefully, which side falls is not a matter of chance nor does the coin frequently land on its edge. There should be constant planning to make both faces equally attractive and of equal weight so that in the long run they will each get equal attention.

Recommendations are expected by the promotions committee. A unanimous and strong recommendation by one's peers in the department or school is valuable. In fact, the absence or weakness of such credentials usually weighs heavily against promotion. A strong and well-prepared recommendation by the department head or dean is an asset. Some officials write to nationally prominent scholars in the field of the candidate requesting opinions on his strength. Such recommendations carry weight but they usually refer to the same qualities which are looked for in the candidate's record.

Records are indispensable to successful candidacy for promotion. It is quite true that a professional person feels much as though he were accumulating Brownie points as he makes up such a dossier. One's daily calendar, annual report, and the continued accumulation of biographical data commonly kept by all of us make the job relatively easy. For the real worker in the profession this amassed information is usually quite imposing and very effective.

Records may be overdone, however—expected daily teaching, testing, and outlines of courses are scarcely noteworthy. Special honors and assignments, publications, or research are more warmly received. On the other hand, too imposing an array of speeches, light articles or reviews, pamphlets, and books may cast an aura of doubt as to the quality of the contributions.

Confining one's enumerated contributions to those made while in the present rank can help avoid the error of excess. If the array is adequate and of good quality, respect is maintained. If little or nothing can be offered in this interim, it is a warning to the candidate and the committee alike.

It is better occasionally to communicate authoritatively rather than to have a continuous diarrhea of light writing. As one rises through the ranks the standards of quality become increasingly exacting and properly so.

Other Factors Considered. Tenure alone counts but little in college promotion. In fact, justified long tenure in rank mitigates against reconsideration for promotion. It's later than you think!

Teaching is an important function, especially in undergraduate classes. In universities, promotion on the basis of satisfactory teaching alone is rare and extraordinary teaching is exceptional by definition. Withal, excellence of instruction is an asset and graduate teaching of quality is given even greater consideration. Teachers of activities must offer other evidence of services to get promoted. However, exceptions are noted for successful coaching.

Services beyond assignment include school and campus committees. Professional contributions beyond membership are noted. Speeches, papers, committee responsibility, and holding of offices are of gradually increasing importance. Community services are certainly to be expected of the educated citizen. Service clubs, Red Cross, the Boy Scouts, United Fund organizations, and church work are examples of desirable contributions. Like ordinary teaching, ordinary services do not weigh too heavily on promotions committees.

High levels of scholarship are expected, especially in the better institutions of learning. If one wants the honor of association one must expect the demands of the competition. Book reviews, if just annotations, are better unlisted. Reviews of critical value are an acceptable minor form of contribution. The quality of articles is more important than their number. Scholarly books are held in real respect and epochal treatises in awe. There is a grey line between the more scholarly books and quality research.

Institutional emphases will differentiate personnel, structures, and requirements. These emphases arise out of markedly different institutional purposes.

The junior college, with its two years of general education, tends to be essentially just an advancement over the work of the senior high school. In fact, many such colleges, institutionally, have been joined with high school courses, classes, and faculty. Secondary school standards tend to be improved upon but the challenge of advanced scholarship tends to be lacking. Research is rare and professional advancement is proportional. This very quality tends to contribute to an internal aspiration for advanced institutional standing. Like the normal schools of 1900's to 1920's, the junior colleges become senior colleges. Unless the averagely younger instructors and professors acquire additional education, the "advanced" courses now offered will lack depth and breadth. Why should such pseudo institutional promotion be accompanied by personal professional promotion?

Colleges—liberal arts and professional—tend to require the doctoral degree for advancement to the higher professional ranks. Promotions, furthermore, tend to require the production of more scholarly writing and some creative research. The doctorate without such professional scholarship and publication is mere obeisance to custom. For the teacher of activities alone there lies little challenge or need for higher degrees. It is only when, in addition to expert instruction, an individual contributes to his profession that advancement and promotion should and will follow.

At the university level, there is no place for the drone, the sentimental Mr. Chips notwithstanding. The need for rich scholarly graduate courses, for the direction of master's theses and doctoral dissertations, and for the production of research and professional texts and periodicals is great. It becomes a moral obligation for the young instructor to prepare himself to take his share of this truly professional load. The old die off, the highly skilled are called elsewhere (no social comparison is intended here), and those remaining must be able to step into the breach. If not, others will and should be promoted around them. The wheel of progress must turn and it is later than you think. When the call comes, will you be ready to respond?

physical education

PHYSICAL EDUCATION—AN ACADEMIC DISCIPLINE

FRANKLIN M. HENRY
University of California, Berkeley

College physical education in America owes much of its genesis to the concept that exercise and sports are therapeutic and prophylactic. In fact many directors of physical education of the last generation were M.D.'s. The school program probably received its greatest impetus as an effort to reduce draft rejects and improve the fitness of youth for military service in World War I. This objective was of course reemphasized in World War II. It is understandable that our professional concern has tended to center on what physical education can do for people rather than the development of a field of knowledge.

The majority of the present senior generation of physical educators received their doctorates in education; thus it is understandable that their orientation has been toward the profession of education rather than the development of a subject field of knowledge. In fact, physical education has the doubtful distinction of being a school subject for which colleges prepare teachers but do not recognize as a subject field, since the typical physical education department is unique in being under the jurisdiction of or closely related to the school or department of education. Some schools or colleges of physical education exist in large universities, and are patterned after the schools or colleges of education.

When a young person planning a high school teaching career begins his college or university degree work with a major, for example, in chemistry, he starts out with freshman chemistry, which has as a prerequisite a course in high school chemistry. He then takes other lower division chemistry courses, to which the first course is prerequisite. In his junior and senior years, he completes an upper division major in chemistry, in order to qualify for the bachelor's degree. This major consists entirely of course content far more advanced than anything he will teach in a high school. Similarly, the student who majors in mathematics must have an upper division major in advanced mathematics, and even his most elementary freshman course in mathematics will be at an advanced level in comparison with the usual high school mathematics courses. In marked contrast, the student who obtains a bachelor's degree in physical education typically has a major that is evaluated and oriented with respect to what he is to teach in the secondary schools, and how he is to do the teaching or how he is to administer the program. Many physical education major programs, for example, do not even require a course in exercise physiology.

Actually, it is both possible and practical to offer a degree with an academic major in the subject field of physical education, and several universities actually have such a degree. If the person obtaining this degree plans to teach in the schools, he supplements the academic major with the necessary courses in methods and other professional topics. Academic vs. professional is not an issue of having either one or the other, since the two are not mutually exclusive. However, the present discussion is not concerned with the merits of one or the other or the nature of the best combination.

Rather, it is concerned with defining, at least in a general way, the field of knowledge that constitutes the academic discipline of physical education in the college degree program.

An academic discipline is an organized body of knowledge collectively embraced in a formal course of learning. The acquisition of such knowledge is assumed to be an adequate and worthy objective as such, without any demonstration or requirement of practical application. The content is theoretical and scholarly as distinguished from technical and professional. (This statement is a synthesis of the appropriate definitions found in several lexicons, and is probably acceptable to most college faculties.)

There is indeed a scholarly field of knowledge basic to physical education. It is constituted of certain portions of such diverse fields as anatomy, physics and physiology, cultural anthropology, history and sociology, as well as psychology. The focus of attention is on the study of man as an individual, engaging in the motor performances required by his daily life and in other motor performances yielding aesthetic values or serving as expressions of his physical and competitive nature, accepting challenges of his capability in pitting himself against a hostile environment, and participating in the leisure time activities that have become of increasing importance in our culture. However, a person could be by ordinary standards well educated in the traditional fields listed above, and yet be quite ignorant with respect to comprehensive and integrated knowledge of the motor behavior and capabilities of man. The areas within these fields that are vital to physical education receive haphazard and peripheral treatment, rather than systematic development, since the focus of attention is directed elsewhere.

Thus, the academic discipline under consideration cannot be synthesized by a curriculum composed of carefully selected courses from departments listed under A, H, P, and S in a university catalog. True, the student who would master the field of knowledge must first be grounded in general courses in anatomy, physiology, physics, and certain of the behavioral and social sciences. But upper division courses need to be specialized, or else the development of the subject field will be haphazard, incomplete, and ineffective. Twenty-four semester units, in fact, may well be insufficient to cover adequately the available body of knowledge. The areas to be covered include kinesiology and body mechanics; the physiology of exercise, training, and environment; neuromotor coordination, the kinesthetic senses, motor learning, and transfer; emotional and personality factors in physical performance; the relation of all these to human development, the functional status of the individual and his ability to engage in motor activity. They also include the role of athletics, dance, and other physical activities in the culture (both historic and contemporary) and in primitive as well as "advanced" societies. Consideration of the relation of these activities to the emotional and physical health and aesthetic development of the individual constitutes an application of the field of knowledge, but may well be presented and integrated with it, provided that priority is given to the basic knowledge rather than its application to health.

This field of study, considered as an academic discipline, does not consist of the *application* of the disciplines of anthropology, physiology, psychology, and the like to the study of physical activity. On the contrary, it has to do with the study, as a discipline, of certain aspects of anatomy, anthropology, physiology, psychology, and other appropriate fields. The student who majors in this cross-disciplinary field of knowledge will not be a physiologist or a psychologist or an anthropologist, since there has necessarily been a restriction in breadth of study within each of the traditional fields. Moreover, the emphasis must frequently be placed on special areas within each of these fields; areas that receive little attention in the existing courses. There is far more material in any of these disciplines than can be included in the usual courses that constitute the major in anthropology, physiology, psychology, etc.

This is comparable to the situation in a number of the disciplines. A biochemist, for example, is necessarily deficient in his breadth of training as a chemist, and he is also necessarily narrow as a biologist. Nevertheless, he is a more competent biochemist than is a chemist or a biologist.

Special hazards and special responsibilities are connected with the introduction of any new field of study. In a major that is made up of courses in a cross-disciplinary department, there is a danger that normal academic standards of depth may be relaxed. For example, an upper division course in exercise physiology will not be respected, and in fact will not ordinarily be authorized in a college of exceptionally high standards, unless a thorough elementary course in human or mamalian physiology is required as a prerequisite. This reasoning holds for all upper division courses in any major that is accepted as a discipline in such a college.

Problems certainly occur in delimiting the field of knowledge outlined above. The development of personal skill in motor performance is without question a worthy objective in itself. But it should not be confused with the academic field of knowledge. Similarly, technical competence in measuring a chemical reaction, or computational skill in mathematics, are not components of the corresponding fields of knowledge. Learning the rules and strategy of sports may well be intellectual, but it is highly doubtful if a course on rules and strategy can be justified as a major component of an academic field of knowledge at the upper division college or university level. There simply is not enough time for such specifics within the undergraduate years.

One may well raise such questions as where, for instance, is the borderline between a field such as physiology and the field of physical education? No simple definitive statement is possible, but it is not difficult to show examples that illustrate the region of demarcation. The existence of oxygen debt is physiology; the role of oxygen debt in various physical performances is physical education. We do not know why a muscle becomes stronger when it is exercised repeatedly. The ferreting out of the causal mechanism of this phenomenon can be considerd a problem in physiology, although the explanation, when available, will be appropriate for inclusion in a physical education course. On the other hand, the derivation of laws governing the quantitative relation between an increase in strength and the amount, duration, and frequency of muscle forces exerted in training is surely more physical education than physiology. Determination of the intimate biochemical changes in a muscle during fatigue would seem to be a problem in physiology, although of direct interest to physical education. Here again, the quantification of relationships and the theoretical explanation of their pattern as observed in the intact human organism is more physical education than physiology. This is not mere application—it only becomes application when such laws are applied to practical problems. The physiology of athletic training is not really application of physiology—rather it *is* physiology, of the sort that is part of the academic discipline of physical education, and only becomes applied when it is actually applied to practical problems. Unfortunately, in this particular area, what is called "physiology of training" consists to a large extent of over-generalized and speculative attempts to apply the incomplete and fragmentary fundamental knowledge currently available. It is to be hoped that this is but a temporary situation.

The study of the heart as an organ is physiology, whereas determining the quantitative role of heart action as a limiting factor in physical performance in normal individuals is perhaps more physical education than physiology. (Certainly the physiology textbooks consider such limitation chiefly with respect to the diseased rather than the normal and physically gifted individuals.) Thus quantitative elucidation of the role of such variables in causing individual differences in performance in the normal range of individuals is of particular concern to physical education but evidently of little interest to physiology. (All of these examples are, of course, borderline by intent.)

Textbooks on exercise physiology are written for physical education courses. Much of the research they describe was done by physiologists. On the other hand, a standard textbook on physiology written for physiologists may not even have a chapter on exercise, and if it does, the treatment is notably incomplete. Similar examples are to be found in the field of anatomy. Textbooks on psychology have at best a sparse treatment of such topics as reaction time, the kinesthetic sense, and motor performance. These are not matters of fundamental interest to present-day psychologists, although they did occupy a position of importance in the first two decades of the present century. Even though anthropologists have long been aware of the role of physical games and sports in all cultures, one cannot find any comprehensive treatment of the topic in anthropology textbooks.

It would be unfair to say that scholars in various fields such as those mentioned above feel that it is unimportant to study man as an individual engaging in physical activity. Rather, the neglect is because this aspect is of peripheral rather than central interest to the scholar in that field. To borrow a figure of speech (not to be taken too literally), anthropology and other fields mentioned approach the study of man longitudinally, whereas physical education proposes a cross-sectional look at man as he engages in physical activity.

It would perhaps not be overly presumptuous to suggest that there is an increasing need for the organization and study of the academic discipline herein called physical education. As each of the traditional fields of knowledge concerning man becomes more specialized, complex, and detailed, it becomes more differentiated from physical education. Physiology of the first half of the century, for example, had a major interest in the total individual as a unit, whereas present-day physiology focuses attention on the biochemistry of cells and subcellular structures. While the importance of mitochondria in exercise cannot be denied, there is still need to study and understand the macrophenomena of exercise. Furthermore, the purely motor aspects of human behavior need far more attention than they currently receive in the traditional fields of anthropology and psychology. If the academic discipline of physical education did not already exist, there would be a need for it to be invented.

[It is beyond the scope of this address to develop the detailed content of the academic major. Textbooks on the historical, kinesiological, and physiological aspects are well known, although not many have adequate depth for an acceptable advanced course. There is a shortage of textbooks in the anthropological-sociological area, and reading assignments in the various aspects of the psychological area must be pieced together from chapters or parts of chapters in numerous psychology textbooks and monographs. The proceedings of the American Academy of Physical Education contain articles by various authors that include references to a wealth of source material.]

intramural athletics

UNIVERSITY OF WASHINGTON MANAGERIAL SYSTEM

LEN STEVENS
University of Washington

Duties and Responsibilities of Volunteer Student Managers Assisting in the Administration of the Intramural Sports Program

1. Senior Manager
    a. To procure managers.
    b. To assign managers to duties.
    c. To indoctrinate managers through regular staff meetings.
    d. To supervise performance of managers.
    e. To evaluate performance of managers as a basis for advancement.
    f. To represent the program at school functions and group meetings.
    g. To promote managers' welfare.
    h. To serve on the intramural advisory council.

2. Junior Managers
    a. To utilize ideas obtained from other schools.
    b. To study and appraise the sport reports on file from previous years.
    c. To send out questionnaires to participating groups to determine reactions to rules and policies.
    d. To make recommendations to the intramural advisory council concerning rule and policy changes.
    e. To equalize work loads among the managers assigned to his sport and supervise their performance.
    f. To evaluate the contributions of managers and make recommendations for advancement to the senior manager.
    g. To set up protest hearings in his sports.
    h. To publicize the sports assigned to him.
    i. To keep scrap books of publicity clippings.
    j. To keep a record of outstanding performances or new records.

3. Sophomore Managers
    a. To assist in the preparation of the schedule.
    b. To distribute schedules and post rules and regulations for competition.
    c. To reschedule contests when postponements are granted.
    d. To contact forfeiting organizations in an attempt to encourage groups to continue in play.
    e. To contact groups when essential information is lacking on score sheets.
    f. To keep league standings and post results of competition.
    g. To prepare a report for the sport at the completion of the schedule and make recommendations for future programming.

4. Freshman Managers
   a. Assist in schedule preparation.
   b. Prepare score sheets and other forms required for participation.
   c. Assemble equipment for contests.
   d. Indoctrinate teams or players and start competition in non-officiated sports.
   e. Represent the intramural administration on the field of play in non-officiated sports.
   f. Keep such records as team sportsmanship ratings, officials ratings, and all star team nominations.
   g. Prepare individual participation cards and record participation.
   h. Act as a scorekeeper in certain sports.
   i. Assist in facility maintenance.

Duties and Responsibilities of Students Serving as Representatives of Participating Groups (Unit Managers)

a. Ensure that eligibility lists of their organizations are submitted and kept current.
b. Enter teams in the sports offered prior to deadline dates.
c. Ensure that members of teams are eligible for contests in which they take part.
d. Make arrangements for the use of facilities and equipment for practice periods.
e. Notify members of teams regarding place, date, and time of contests.
f. Ensure that teams do not forfeit.
g. Promote good sportsmanship.
h. Represent their organizations in such matters as protests, forfeits, and postponements.
i. Attend meetings for unit managers.
j. Check on eligibility of opponents.
k. Ensure that team members obtain health certification.
l. Act as members of the intramural advisory council.

CURRENT TRENDS—PERSONNEL AND PROGRAM REQUIREMENTS

EDSEL BUCHANAN
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It is most important that anyone participating in a discussion of a specific area of organization and administration of intramural sport activities should realize that it is most unrealistic to expect a single pattern of organization and/or administration to apply to each and every institution of higher education. Although each school certainly must function in specifics regarding its geographical location, enrollment, budget, staff, facilities, program, and the like, I feel that three groupings would probably encompass the majority of the organizational and administrative practices of most of the intramural programs throughout the nation. This paper is related to the group of colleges and universities which I classify as of medium size, situated essentially in the geographical location of this particular Southwest area.

Certainly the organizational structure within which the program operates will determine what personnel comprise the intramural sports staff. Only in very large institutions will one normally find the program being operated by intramural personnel only. The majority of the programs are operated by physical education personnel who have both teaching and intramural responsibility. Coaches are seldom found within the personnel of the program because of the strenuous demands placed upon their time to produce winning teams. In this age of specialization, even intramurals are beginning to specialize and operate essentially with intramural personnel only. Almost every program will utilize either graduate assistants, student teachers, student assistants, or student managers, and most of the people other than student managers will come from the physical education department. The responsibilities that are assigned to the various types of personnel vary, but essentially those in charge of the program with direct administrative authority serve in the capacity of program directors or program supervisors. Normally this category would include the director of the program, the assistant director, graduate students and, in a few instances, undergraduate student assistants. I believe that the line of authority should not extend to any personnel below the graduate level. It is extremely difficult to assign authority to those in undergraduate positions and to expect good rapport with their fellow students in supervisory situations.

In all instances, the number of people needed to operate an intramural program can be directly related to the budget and number of participants within the program. I am convinced that the quantity of participation and the quality of program have a direct and significant correlation with the operational budget. Many things will enter into the numerical requirements of those essential to operate a program; however, two items are more significant than anything else. The first relates to the support for intramurals by the college or university administration. The second relates directly to the number of participants. Most of the other factors which enter into personnel have been very well covered in the Washington Conference Report of 1955, which is generally available to all intramural people.

The future of the intramural programs within the colleges and universities of our nation looks quite good. There seem to be some trends, practices, innovations, policies, etc., which are becoming known and accepted. It appears that some are like a two-edged sword—they can be both good and bad depending upon where they are occurring and the time of occurrence. Rather than generalizing about some of these trends, practices, and predictions, I will list a number that appear to be coming to the forefront.

1. Many states are withholding tax funds from intramural programs with the result that programs are predominantly becoming supported through local funds.
2. Some states are eliminating required physical education from some institutions of higher learning. This results in a two-fold effect:
   a. Staff, equipment, and facilities are drastically affected unless maintained through local funds.
   b. A tremendous load is thrown upon intramural programs in providing for the sports activity recreational outlet of the students.
3. More programs are utilizing paid supervisory officials as opposed to a straight managerial system.
4. Intramurals are becoming more important in almost all institutions and may eventually completely replace their required and/or service programs. This appears to be a direct result of items 1 and 2.

5. Intramural programs will become more specialized in program content in that more programs will offer competitive sport activities involving big muscle physical activity as opposed to noncompetitive activities, outing activities, and social and creative activities. This appears to be a result of the specialization which seems to be becoming general these days and also to be a result of 1 and 2 above.

6. In today's service programs, fitness is stressed as much as or possibly more than the carry-over value merits. This seems to be a result of an unwillingness of state legislatures to financially support programs involving a large number of instructional courses in recreation activities.

7. There will be a continual increase in the need for intramural programs to offer sport skill instruction in program activities. Again this is a direct result of some of the above-mentioned items.

FACTORS THAT DETERMINE THE NUMBER OF PERSONNEL NEEDED TO OPERATE A COLLEGE INTRAMURAL PROGRAM

JOHN H. KARL
Purdue University

In 1913, A. S. Whitney, former dean of the School of Education at the University of Michigan, and a member of the Faculty Athletic Committee, first inaugurated a Department of Intramural Athletics. During its infancy, intramural athletics was under the control and supervision of one man, who was expected to handle the demands for competition in the leading sports. Now that intramural programs are growing—and continue to grow together with our educational system, increased enrollments, and the founding of new colleges and universities—educators have realized that more than one individual is needed to organize and administer any college intramural program satisfactorily.

Before I present those factors which I believe are most important in determining the number of personnel needed to conduct a college intramural program, I must report that I have not developed any single formula that could be used for this purpose, nor do I believe that these are the only determining factors in all cases. I am sure you will agree that there are determining factors in some individual situations that are not applicable in others. However, I feel that the factors I shall present have the greatest influence and are the most common in most situations.

There are chronological measures involved that determine the number of individuals needed to operate any program, not only intramurals, but other disciplines as well. And of primary consideration in every case is philosophy, whether it be the philosophy of an academic counseling program, or the philosophy of a teacher education department. It is philosophy, both individual and collective, that determines the administrative structure of our intramural programs. Louis Means, in *The Organization and Administration of Intramural Sports,* mentions four general types of administrative controls prevalent in our nation's colleges today.

1. Athletics, physical education, recreation, and intramurals are all combined into a unified administrative unit.

2. The physical education department is an entirely separate unit from intercollegiate or interscholastic athletics, and has as one of its branches the intramural program.

3. The intramural department is separate from interschool athletics, and is largely student-controlled and operated.

4. There is a separate school of health, physical education, and athletics with a dean and all necessary department chairmen.

Philosophy influences each structure and also provides the director and the department with a basis for selecting additional personnel.

In selecting a controlling figure to conduct the intramural program, philosophy again exerts much pressure. More and more institutions are realizing that intramurals should be the responsibility of one man with special training, strong interest, enthusiasm, and experience in this area. There is a definite trend in this direction, together with the theory that the varsity coach or the physical education instructor should not be assigned the duties of directing the intramural program because of his primary responsibilities, to which he devotes a major portion of his time and energy, and therefore neglects the intramural program so that it does not grow in scope or prominence.

Four of the most important components that determine the number of personnel needed to operate a college intramural program are: student enrollment, available facilities, units of competition, and the program of activities. All four are dependent upon each other, with student enrollment and facilities being the most decisive measures. The size and units of competition are determined by the number of students, and by whether they reside in a social fraternity or sorority, residence hall, cooperative housing unit, or do not have any affiliation with any of the institution's various living accommodations. And it is the quantity and availability of facilities, along with student interest and participation, that determine the program of activities. The combination and magnitude of these four elements have a considerable effect on regulating the size of the intramural staff.

Other less significant but important factors that should be taken into consideration are geographical location and climate. Although they do not influence the number of administrative personnel as much as they affect the program of activities, climate and location do create new activities and therefore increase the need for proper supervision, planning, scheduling, and possibly officiating. To emphasize this situation with a practical example, consider those institutions that during the winter months include in their program such activities as ice hockey, speed skating, curling, figure skating, and skiing, together with the traditional sports of basketball, volleyball, swimming, wrestling, and handball. And in those institutions that enjoy a warmer climate, there are extended seasons in the majority of outdoor activities and the addition of activities that would be impractical in areas which have less favorable weather conditions. Although neither situation necessarily influences an increase in administrative personnel, it does place the burden of responsibility for proper leadership and supervision on the director, or supervisory personnel selected by him.

One might consider the factors suggested thus far as possible criteria only for determining the total number of full-time administrative personnel. At this point I would like to pose a number of questions which, I believe, will affect future trends in intramurals which are relative to determining the total number of personnel needed to operate a college intramural program. Much of the following information is the result of my limited, but most enjoyable, experience with intramural athletics at Purdue University. It is therefore directed toward the large college or university, but I hope that the smaller institutions will also benefit.

It is not difficult to predict that in the future more and more institutions will be constructing recreational facilities, with the same philosophy and purpose in mind that influenced the construction of Purdue's Recreational Gymnasium. This alone will be reason enough for an increase in administrative, clerical, service, supervisory, part-time, and student personnel. With such a facility, the intramural and recreational programs will expand to include many other facets presently controlled by other departments. Then who will have the responsibility of conducting the corecreational program? Who will be responsible for satisfying the new ideas and interests of the students? Who will supervise the various sports clubs that are associated with an extensive program? Who will be responsible for the women's intramural sports programs? Who will supervise the summer recreational schedule? These are just a few of the additional responsibilities that could be absorbed by the intramural department together with the construction of a new recreational facility. One can readily see that this would affect total personnel.

Two final, unrelated but well known factors which will undoubtedly influence the future of intramurals are: (a) the recent adoption of the trimester plan and (b) the utilization and expansion of the extramural program by many of our universities and colleges. Neither factor is directly responsible for an increase in staff, but individually they can be labeled as current trends throughout the nation which will effect present administrations in such a way that additional supervision and leadership must be considered.

During the past 50 years, intramural athletics has developed into an integral and important educational phase for every student it has served. As long as the desire to compete continues to grow, not only in the gifted, but also in those of less ability, and with the increased emphasis on physical fitness as prevalent as it is today, intramural athletics will have to provide the necessary time, space, equipment, and supervision to satisfy this need. In this case, intramural athletics will have to expand both in program and personnel. The purpose of this paper was to offer possible factors to be considered in determining the number of personnel needed to meet such an expansion satisfactorily.

EFFECT OF SELECTED MOTIVE-INCENTIVE CONDITIONS UPON DEVELOPMENT OF STRENGTH THROUGH AN ISOMETRIC TRAINING PROGRAM[1]

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In physical education and athletics, motivation has always been considered an important determinant of the caliber of performance achieved. Although various motive-incentive conditions are commonly utilized in athletics and physical education, few such conditions have been carefully examined by experimental procedures. Hence, a knowledge of the motive-incentive conditions that may be applied effectively in a long-term training program designed to develop strength should constitute a contribution to the literature.

Purpose

The purposes of this study were: (a) to determine the influence of four selected motive-incentive conditions upon the effectiveness of a six-week isometric training program for the development of strength in the elbow flexor muscle group, and (b) to determine how in this six-week isometric training program the four motive-incentive conditions influenced the development of local muscular endurance as measured by an average strength score obtained during the third bout of a three-bout isometric training program. The following motive-incentive conditions were employed.

1. A situation in which the subject was a member of a group that competed against another group.
2. A situation in which the subject strived to attain a standardized goal.
3. A situation in which the subject competed with another subject of nearly equal ability.
4. A situation in which the subject had visual knowledge of his progress while attempting to better his previous performance.

Procedure

DESIGN OF EXPERIMENT

On the basis of their best strength scores on an initial strength test, 72 subjects were assigned to six matched groups (12 in each group) by the rank order method. These groups were then randomly assigned to four motive-incentive conditions, a training control group, and a non-training control group. Two times each week for a period of six weeks the four motive-incentive groups participated in an isometric exercise program, each group performing under the appropriate motive-incentive condition. The training control group also trained two times each week in the isometric training program but were not systematically subjected to a motive-incentive condition. The subjects assigned to the non-training control group were, after the initial test, released until the final testing session. A final test was administered to all groups at the end of the six-week session.

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[1] Bibliography and tables for this paper available from the author upon request.

Muscular strength and endurance data were recorded for each subject during each exercise bout in all training and testing sessions.

The results of the final test were subjected to an analysis of variance to determine if there were differences among the groups in (a) best-strength scores, and (b) local-muscular-endurance scores.

SUBJECTS

The 72 subjects were volunteers from the freshmen and sophomore classes enrolled in the physical education sports skills sections in the Department of Physical Education for Men at the State University of Iowa during the second quarter of the second semester of the 1962-63 school year. The subjects were aged from 18-24 years.

MEASUREMENTS

Two measures of strength were obtained from the flexors of the elbow during each testing and training session: a best-strength score and a local-muscular-endurance score. The best-strength score was the maximum score attained on the recording device by a subject during any one of the three 15-sec. exercise bouts in a given testing or training session. The local-muscular-endurance score was determined by taking the mean of three selected strength scores (scores during 3rd, 8th, and 13th seconds) in the third exercise bout of the testing or training session.

The angle formed by the upper arm and the forearm was 90° during all isometric testing and training sessions.

INSTRUMENTS FOR OBTAINING DATA

The design of the experiment necessitated the recording of muscular strength and endurance data for each subject during each exercise bout in all training and testing sessions. The back-and-leg dynamometer as designed by Tuttle was adapted to this purpose and was connected to an Esterline-Angus Graphic Recorder, which provided a continuous record of the force exerted in chart units which, in turn, were converted into pounds of force.

An elevated chair was constructed and mounted upon the platform of the back-and-leg dynamometer for the testing and the training procedures. Armrests and chest straps were used to stabilize the subjects during the testing and the training sessions. Straps were designed to fit over the wrists of the subjects. These straps were attached to a bar which, in turn, was hooked into the chain of the back-and-leg dynamometer. Each subject held a cylindrical rod in the palms of his hands to prevent the forearms from rotating medially during the exercise bouts.

INITIAL TEST

Before the administration of the initial test, all subjects were asked to read printed instructions concerning the exercise procedure. Immediately prior to the initial testing, the researcher verbally reviewed these same instructions with each subject. The subjects were then instructed to make one practice attempt at approximately one-half of maximal force for 2 or 3 sec., to become familiar with the apparatus. This trial also allowed the researcher to determine if the subjects were performing the exercise correctly. The subjects then exerted maximum force against the apparatus throughout three 15-sec. bouts of exercise, resting for 30 sec. between bouts. During the initial testing all subjects were encouraged to strain maximally in all bouts of the isometric procedure.

On the basis of the best-strength score achieved on any bout during this initial test, the 72 subjects were assigned to six groups (12 in each group) by the rank order method.

GROUPS

The four motive-incentive groups and the two control groups that participated in the 6-week training program are described below.

Group I: *Team competition.* From the results of the initial testing (best-strength score achieved on any of the three bouts), the subjects in the team-competition group were divided into two teams of approximately equal ability which competed with each other for the duration of the training program. All members of both teams were present when the individual members of each team were training on the apparatus. The subjects were allowed to encourage their teammates to do as well as possible. A record of the best-strength scores for each team was kept on a blackboard for all members of this group to observe. Each team alternated in sending teammates to the training apparatus with the members having the lowest strength scores going first and continuing until the strongest member of each team had performed.

Group II: *Standardized goals.* The subjects assigned to this group were given a goal (an improvement of 5 percent in strength each week) to strive to attain each week (two training sessions). The best-strength score for each subject for the initial test was used as the basis for computing his 5 percent improvement increment for the first week of the training program. In each succeeding week, the best-strength score achieved in any bout during the previous week was used as the basis for computing the 5 percent improvement increment.

Group III: *Competition with someone of near-equal ability.* Each subject in this group was matched with another subject of nearly equal ability as shown by the best-strength scores on the initial test. The matched pairs of subjects then reported for training at the same time and observed each other during the three bouts in each exercise session.

Group IV: *Visual knowledge of progress.* The subjects in this group were allowed to watch the stylus of the Esterline-Angus Recorder during each training session. A single dot indicating the highest score the subject had achieved in each bout in the previous training session was placed on the recording paper for the subjects to observe while exercising. In addition the subjects observed while exercising a line drawn on the recording paper for each bout of the exercise session, that represented the score of the mean of three points (3rd, 8th, and 13th sec.) achieved in the previous training session. The subjects were encouraged to better their peak performances of the previous training session and also to keep at all times the recording stylus higher than the line drawn on the recording paper.

Group V: *Training control group.* Upon completion of each day's training session, the subjects in the training control group were told their best-strength score. No attempt was made to encourage these subjects to improve their performance.

Group VI: *Non-training control group.* The subjects assigned to the non-training control group were released from the experiment during the training program and did not report back to the experimenter until the final testing was conducted.

TRAINING PROGRAM

The subjects in the four motive-incentive groups and the training control group reported for the isometric training sessions two times each week for a 6-week period

(12 sessions). During each testing and training session the subjects performed three bouts of the isometric exercise, utilizing the elbow flexor muscles. The exercise bouts were the same as for the initial test, i.e., 15 sec. in length, with a 30-sec. rest period between bouts. During each 15-sec. exercise bout the subjects were instructed to maintain a maximal contraction. During the training program, all 12 sessions of training were conducted under motive-incentive conditions for the four motive-incentive groups. The training control group trained without an induced motive-incentive condition.

FINAL TESTING

Without utilizing any motive-incentive conditions, the final test (which was the same as the initial test) was administered individually to each subject in the six groups at the end of the isometric training program. Both the best-strength score and the local-muscular-endurance score were recorded for each subject. During this final testing all subjects were urged to strain maximally throughout the entire testing session.

Analysis of Data

The Pearson product moment test-retest method was utilized to compute the reliability of the best-strength scores obtained during the first session and the second session in the third week of the training program. The r obtained on measures for the 60 subjects in the four motive-incentive groups and the training control group was .92.

The data were subjected to the Type III methods-by-subjects analysis of variance as described by Lindquist.

Because the subjects were matched on the basis of the initial test scores, the final test scores were used for the analysis of variance. The data for best-strength scores and for local-muscular-endurance scores were analyzed. A probability level of .01 was required to denote statistical significance.

The means of the best-strength scores on the initial test and the final test and the differences between these means for the four motive-incentive groups, the training control group, and the non-training control group are reported in Table 1.

The results of the analysis of variance for the best-strength scores for the four motive-incentive groups, the training control group, and the non-training control group on the final test are reported in Table 2. The F obtained was 3.63, which is statistically significant at the .01 level (minimum F required for .01 level of significance = 3.37).

Table 3 shows the differences between the means for the four motive-incentive groups, the training control group, and the non-training control group on the final test. The critical difference between these means that is required for the .01 level of significance was found to be 18.8 lb., thus, any difference of 18.8 or larger denotes statistical significance at a probability of .01. Table 3 shows that the means for the best-strength scores on the final test are significantly greater for team competition, visual knowledge of progress, and competition with someone of nearly equal ability, than the mean for the non-training control group.

The means of the local-muscular-endurance scores on the initial and final tests—and the differences between these means for the four motive-incentive groups, the training control group, and the non-training control group—are reported on Table 4. The results of the analysis of variance for local-muscular-endurance scores for the four motive-incentive groups, the training control group, and the non-training control group are reported in Table 5. The F obtained, 2.31, was not sufficiently large to denote statistical significance (minimum F required for .01 level of significance=3.37).

Discussion of Findings

The three groups that exercised under the motive-incentive conditions of team competition, visual knowledge of progress, and competition with someone of near-equal ability, made a significantly higher score on the final test than did the non-training control group which did not participate in the 6-week isometric training program. The group that exercised under the motive-incentive condition of standardized goals and the training control group did not make a significantly higher best-strength score on the final test than did the non-training control group. Because it was the purpose of the motive-incentive conditions to encourage the subjects to perform maximally, perhaps the results give an indication of the potency of these motive-incentive conditions (team competition, visual knowledge of progress, and competition with someone of near-equal ability) in a training program where the development of strength is the desired factor.

Neither the groups that exercised under the motive-incentive conditions of team competition, visual knowledge of progress, competition with someone of near-equal ability, and standardized goals, nor the training control group, made a significantly higher local-muscular-endurance score on the final test than did the non-training control group which did not participate in the 6-week isometric training program. Thus, the findings support the generally recognized concept that isometric training programs do not substantially increase muscular endurance.

Conclusions

1. The motive-incentive conditions of team competition, competition with someone of near-equal ability, and visual knowledge of progress proved to be effective in the development of strength when imposed during a 6-week isometric training program.
2. The motive-incentive condition of standardized goals and a situation in which no motive-incentive condition was imposed did not prove to be effective in the development of strength during a 6-week isometric training program.
3. None of the four motive-incentive conditions of team competition, competition with someone of near-equal ability, visual knowledge of progress, and standardized goals, or the situation in which no motive-incentive condition was imposed proved to be effective in the development of local-muscular-endurance during a 6-week isometric training program.

EFFECT OF INHALATION OF SMOG ON CARDIORESPIRATORY RESPONSES[1,2]

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Athletes in many cities have often reported pulmonary discomfort during and following competitive activity throughout periods of high concentrations of smog. An experiment was therefore designed in which human subjects, under controlled conditions, were exposed, during rest, exercise, and recovery, to a specific constituent of photochemical smog, namely peroxyacetyl nitrate (PAN). The object of the investigation was to discover if, at concentrations of 0.3 parts per million, (estimated to be the concentration of heavy atmospheric smog) the pollutant, PAN, as contrasted to filtered air, had a significant effect upon specific cardiorespiratory responses of young males.

Middleton has estimated that California agriculturalists lose $8 to $11 million a year as a result of flowers and vegetables being ruined from the adverse effects of smog. In 1956 visible damage to crops was estimated at over $1 million. Plant damage attributable to PAN observed in California and in 19 other states indicates the widespread occurrence of this specific photochemical product of air pollution.

It has been demonstrated that public health *may* be affected by air pollution in the following manner: eye and respiratory passage irritation occur; toxic effects on the human body are caused; allergic conditions such as hay fever and asthma are aggravated, and certain infections are conveyed by dusts in the atmosphere. The most widespread detectable effect of smog upon the health of residents in the Los Angeles basin has been found to be eye irritation.

A recent penetrating review by Goldsmith reported that different investigators did not agree upon the magnitude of the relationship between air pollution and morbidity and mortality rates. Studies from Great Britain are more suggestive of there being relatively strong relationships between morbidity and mortality rates from chronic bronchitis and air pollution, and mortality from lung cancer and air pollution. However, Goldsmith reservedly concludes that the evidence concerning the previously mentioned relationships, as reported by various American investigators, is not as impressively conclusive as the British studies.

Photochemical Smog

In Los Angeles, and many other industrialized cities, hydrocarbons and nitrogen oxides are photochemically changed when exposed to suitable conditions of solar radiation and yield as products ozone, peroxyacyl nitrates, and perhaps other reactive substances. Nitrogen dioxide absorbs sunlight to yield oxygen atoms which react with oxygen in air to produce ozone. Among the number of compounds produced as a result of photochemical air pollution (PAP) are the PAN (peroxyacetyl nitrates) which incorporate some of the nitrogen dioxide, which indirectly produces ozone.

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[1] This study was supported by a research grant from the California State Department of Public Health. The author is grateful for the assistance provided by faculty members of the University of California, Riverside Air Pollution Research Center.

[2] Bibliography and tables for this paper available from the author upon request.

Peroxyacetyl nitrate (PAN), a chemical constituent of mixtures which are affected by ultraviolet light, was recently isolated by Stephens and others and is the first pure compound recognized as being capable of causing plant damage and eye irritation. Apart from its known eye irritant effects at low concentrations, it has also been found in air concentrations far below 1 PPM and has toxicant effects such as severe glazing and bronzing of the under surface of the leaves of certain plants. PAN has been described as a highly oxidized unstable organic nitrogen compound which has been found to be a constituent of polluted atmospheres.

Because of the toxic and irritating properties which PAN has been shown to have upon plants and animals, it was postulated that the presence of PAN in the polluted photochemical atmosphere of large areas of California could have a detrimental effect upon specific cardiorespiratory responses of humans.

Method and Equipment

Thirty-two college males, averaging 21 years of age, volunteered as subjects. Before acceptance as subjects a health check regarding specific components of physical fitness (which included a screening of any previous smoking habits, allergies, coughs, etc.) was conducted to ensure that they were capable of participating in the test without any possibility of injurious side effects.

A friction-type bicycle ergometer was calibrated so that the subject worked against a constant load of 900 mKg at a rate of 50 wheel rpm. From an unlabeled pressurized tank of filtered "clean" air, samples of which had been previously tested on a Wilkins Aerograph gas chromatograph to ascertain the possibility of the presence of any atmospheric pollutants, a continuous volume of air was monitored to the inspiratory inlet of a Hans Rudolph High Velocity valve. A similar procedure was followed for the supply of pollutant from the PAN tank with one exception—because of the oxidizing qualities of PAN, a plastic tube and a bag were substituted for the rubber material. A clamp was attached to the nose of the subject who was not informed as to whether he was breathing clean air or PAN. The absence of smell or taste for both air and PAN also ensured that the subject could not determine which gas was being monitored to him, thereby controlling any possible psychological reaction which could skew the results. In series with the expiratory outlet of the Rudolph valve was a Fleisch pneumotachograph which was used to measure the subject's maximal expiration velocity, during the rest, exercise, and recovery phases.

Each subject sat quietly on the bicycle for 5 min. during which time his expired air was collected in a 30 liter neoprene "rest" bag. Immediately prior to the 5-min. exercise period, air flow to the rest bag was clamped off and the expired air was diverted into the "exercise" plastic storage bag. Inserted into the bottom of each of the exercise and recovery bags were two plastic tubes leading to two Precision Gas Test Meters which were in turn connected to two vacuum pumps. Following the completion of the work period, the exercise bag of gas was mixed and the appropriate vacuum pump was started. While the flow of air from the bag continued a hypodermic syringe was consecutively filled and emptied four times and the last volume was used as the gas sample. Subsequently, the total exercise gas volume was recorded from the meter. At the end of the 7-min. recovery phase the same procedure was followed for the collection of a gas sample and recording of air volume.

The expired air in the rest bag was mixed and, following the extraction of a gas sample, its volume was measured with the aid of a Collins Respirometer which had been calibrated prior to, and during, the experiment. The two wet test meters were calibrated before use and the accuracy of each instrument was determined to be .05 percent. To ensure a valid reading, the pumps were adjusted so that the maximal capacity flow of gas through the meter was 11 liters per minute. Temperatures were recorded from the gas meters and the respirometer during the measurement of the expired air. A relatively constant temperature of 25 C and a relative humidity of 50 percent was attained by the use of a "desert cooler" refrigerator system and fan. Barometric pressure was recorded during the trials of each subject. A Lowenco Model 15 gas chromatograph, specially adapted for filament block and connected to a Honeywell recorder, was used to measure the components of expired gas. Periodic calibration of the chromatograph was made during gas analysis using known standard concentrations of oxygen, carbon dioxide, and nitrogen. Using the previously measured volumes and the gas concentrations determined from the chromatograph, the oxygen uptake was calculated by the standard method. Heart rate, respiration rate, and maximal expiration velocity were simultaneously transcribed on a transistorized Offner type R Dynograph.

Results and Discussion

The basic objective of the project was to determine whether the photochemically produced compound PAN, a component of Los Angeles type smog, affected the oxygen uptake of young men under conditions of moderate exercise of short duration. Since no data were available to define actual ambient levels of PAN, a level expected to be roughly at the diurnal maximum for a smoggy day was selected. Thus, the conditions tested might be roughly equivalent to a brief outdoor exercise period for college students. The data were arranged to allow an analysis of variance with the subsequent F test being used to determine the statistical significance of the differences.

The direct effect of gas (PAN vs. air) was statistically significant ($F = 4.51$) which is interpretable as an overall increase in oxygen uptake during the exposure to PAN. Hence, the null hypothesis that PAN would have no effect upon oxygen uptake was rejected. The six-way comparison of gas within phase (rest, exercise, recovery) was also significant ($F = 4.22$). This variance term is composed of the two terms gas and gas × phase interaction, both being significant. The important inference from these results is that rest, exercise, and recovery do not show parallel shifts in oxygen uptake between air and PAN. Visual examination of the means for these six points made it apparent that PAN has little effect at rest, the largest effect during exercise, and a moderate influence during recovery. Direct test of these three means revealed F values supporting the visual observation of the mean differences with an F ratio of 4.80 (significant at the 5 percent level) during exercise.

As the influence of PAN upon oxygen uptake has been demonstrated under these specific conditions, the next point of interest was to determine why the increase occurred. This experiment was not designed to provide such answers, but simple measures of physiological activity; namely, respiration rate, heart rate, and maximum expiratory velocity, were recorded and statistical analyses similar to those for oxygen uptake were determined.

The subject × gas interaction was used as the error term in computing for all four variables (oxygen, heart rate, respiration velocity, and respiration rate). The error term was significantly greater than the subject × gas × phase interaction in two cases (respiration rate and expiration velocity).

In every analysis the variance ratio for phase was the largest, an expected reflection of the difference between rest, exercise, and recovery. Not unexpectedly, the variance ratio for rest, where calculated, is significantly lower than those for exercise and recovery. This suggests that the variances are correlated to the means, and that the complete data tests are not theoretically proper, at least for the main effects of gas and subjects. The tests of subject × phase interaction were significant in all four variables, supporting this thesis. Observation of individual's data shows that shifts in values from rest to exercise to recovery are not parallel, thus decreasing the sensitivity of the data.

The load of work used in the current experiment was 900 mKg/min. The average oxygen uptake for the subjects was 2.06 liters/min. while exercising and breathing filtered air. This figure is in very close agreement with the results reported by Åstrand who found that his 29 male subjects, while exercising on a bicycle ergometer with a very similar work load and the same rate of work, had an oxygen uptake of 2.15 liters/min.

As there was no significant difference in the respiration rate and the volume of air exhaled during the exercise phase when the subjects inhaled filtered air and PAN, there is a heightened possibility that the increase in oxygen consumption during this phase was the result of an increase in the respiratory airway tissue resistance and lung compliance. The inhalation of PAN may result in the respiratory muscles having to contract more forcefully and for a longer time period and therefore having to use more oxygen to move the same volume of air than when the same subjects inhaled filtered air.

Inhaled cigarette smoke, like some other pollutants such as sulfur dioxide, nitrogen dioxide, and inert dusts have been shown to increase airway resistance. As suggested by Nadel and Comroe, the significant decrease in the conductance/thoracic gas volume may be indicative of a decrease in the cross-sectional area of the airways, probably due to bronchiolar constriction rather than to vascular congestion, mucus secretion, or mucosal edema.

Maximal Expiration Flow Rate, Respiration Rate, Heart Rate

An analysis of variance showed that there was a significant difference ($F = 2.90$) in the average maximal expiration velocity during the recovery stage while there was very little difference in the resting expiration velocities (air = 129 liters/min. and PAN = 132 liters/min.). However, throughout exercise and recovery the expiration velocity during the inhalation of PAN was 354 and 182 liters/min. respectively—5 and 14 percent less than the maximum expiration velocities recorded when breathing filtered air. It must be realized that in the current study the maximal expiratory figures are the mean values for the peaks of each expired breath during the intervals of rest, exercise, and recovery.

The main focus of interest, namely the source of variance, gas (PAN, air), had an insignificant effect ($F = .98$) upon the respiration rate. The resting respiration rates for the subjects, while breathing both air and PAN, were 13 breaths per minute. This is well within the average breathing frequency of 11 to 14 breaths/min. for healthy individuals under basal conditions. During exercise the average rate increased to 23, then, following cessation of work, the rate returned to an average of 16 during the 7-min. recovery phase.

The main source of variance, gas, had no significant effect ($F = .22$) upon heart rate during rest or recovery. Heart rates while breathing PAN and filtered air were very similar, namely 82 and 81 beats/min. at rest and 101 and 103 beats/min. during recovery. Because of technical difficulties during the exercise phase heart rate data was not recorded. An important consideration in studying the relationship between resting and post-exercise pulse rates is the difficulty of obtaining a true resting pulse. Pulse rates of many subjects after exercise have shown that the post-exercise pulse follows exponential curves with the more efficient subjects recovering faster.

Summary and Conclusions

Hemeon has stated in his chapter on the "Effects of Air Pollution on Human Health" that investigations concerned with the health effects upon man have been carried out in localities with relatively low concentrations of air pollutants and for many reasons, including the difficulty in assessing health effects, great doubt has been cast on the validity of the conclusions reached in some of these studies.

The acute toxicity of ozone has been demonstrated to be strikingly enhanced if animals, during exposure to noninjurious levels of ozone, are concurrently subjected to intermittent exercise. The results of the present experiment demonstrated that the pollutant PAN had a significant effect upon the oxygen uptake of the subjects when they were exposed to the additional stress of exercise. Therefore, future investigators who study the problem of the effect of atmospheric pollutants upon the respiratory efficiency of man may be well-advised, wherever possible, to include the phase of exercise in their experimental design.

Evidence is now available which has demonstrated conclusively that smog and especially the specific smog compound PAN is causally associated with the extensive damage of plants. The recent unpublished work of Campbell and associates at the Air Pollution Research Center at Riverside has also shown that PAN is lethal to mice at certain concentrations. The results of the present study demonstrated that PAN significantly affected the oxygen uptake of humans during exercise and the maximal expiratory flow rate during the recovery phase following exercise.

FACTORS ASSOCIATED WITH MAJOR KNEE INJURIES IN VARSITY FOOTBALL[1]

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Slippery Rock State College, Pennsylvania

The purpose of this study was to investigate and analyze the incidence of knee injury in collegiate football in order to identify the factors which significantly influence or contribute to the reduction and prevention of those injuries in intercollegiate football competition.

The ultimate goal of this investigation was to provide information for guiding administrators, directors, and coaches in developing a program of knee injury prevention in football competition.

Methodology

The descriptive design and the survey pattern were used in this study. The chi square technique of data analysis was selected by the investigator as the means to show relationships of factors considered to influence or contribute to the reduction and prevention of injury to the knee in football competition. Considered factors were analyzed under a null hypothesis. This, simply stated, means that there will be no significant difference between the expected frequencies and the observed frequencies.

The researcher adopted the .05 level of significance for this study. This was determined by his estimate of the importance in the practical significance of his findings.

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[1] Bibliography available from the author upon request.

Procedure

A survey was made of research and literature related to knee injury. Analysis pointed up the need for this investigation.

Authorities generally agreed that improvement in reduction and prevention of athletic injury was possible and necessary. Therefore, it would be important to identify the influencing factors that contribute to or control the incidence of knee injury in order to initiate and develop a program to reduce or eliminate this type of injury in football.

A questionnaire was developed including the items which seemed to influence the incidence of knee injury in football competition. The questionnaire was divided into three areas: (a) general information, (b) questions concerning the case injury, and (c) data covering the individual characteristics of the injured participant.

Guidance for developing the questionnaire on possible contributing factors was secured from several sources: physicians, trainers, coaches, officials, and administrators. The suggestions obtained were augmented by factors gleaned both from the review of literature and from the experience of the investigator.

The developed questionnaire was sent to selected colleges and universities. The selection of the participating institutions was dependent upon the following criteria:

1. Willingness and interest in providing the necessary information.
2. Adequate geographical representation.
3. Large and small institutional ratio as stipulated by the organization procedure.

The data from the questionnaires returned by the 34 participating colleges and universities were tabulated. A brief composite summary of the incidence of injury, the time lost from participation, and the total number of participants in the large and small institutions follows:

TABLE 1.—COMPOSITE COMPARATIVE TOTALS

	No. of colleges or universities	Cases of football knee injury	Practice days lost	Game days lost	College sq. size
Small College Total	11	31	890	113	570
Large College Total	23	124	3361	340	2521
Composite Total	34	155	4251	453	3091

The tabulated information from the questionnaires was statistically tested by the chi square technique and processed by an IBM computer. The .05 level of significance was used. Forty-four of the 207 tested factors were found to be significant at the .05 level and consequently were concluded to be influential in contributing to the control of knee injury in intercollegiate football.

Factors tested and found significant were as follows:

Institution has scholarship program
Freshmen are eligible for varsity competition
Full-time trainers provided
Part-time trainer is faculty member
Physician status
Training table provided
Participant's year in school
Spring football practice provided
Off-season training is basketball
Off-season training is track
Off-season training is baseball
Off-season training is weight program
Coaching staff size

Freshmen eligible to participate vs. full-time trainer
Freshmen eligible to participate vs. full-time physician
Freshmen eligible to participate vs. physician on call
Freshmen eligible to participate vs. spring football practice
Scholarship program vs. spring football practice
Staff size vs. squad size—small institution
Staff size vs. squad size—large institution
Head coach responsibility vs. basketball coaching
Head coach responsibility vs. track coaching
Head coach responsibility vs. unclassified
Assistant coach responsibility vs. baseball coaching
Assistant coach responsibility vs. track coaching
Head coach responsibility vs. unclassified
Coach's academic responsibility
Academic responsibility vs. spring practice
Head coach responsible for track vs. spring practice
Head coach responsible for baseball vs. spring practice
Assistant coach responsible for track vs. spring practice
Assistant coach responsible for baseball vs. spring practice
Sophomores hurt in last third regular practice session
Seniors hurt in second third preseason practice
Freshmen eligible for participation vs. large and small colleges
Full-time trainer vs. large and small colleges
Trainer status vs. large and small colleges
Physician status vs. large and small colleges
Spring practice vs. large and small colleges
Assistant coach responsible for track vs. large and small colleges
Training table provided vs. large and small colleges
Preventive taping
Size of coaching staff in large colleges
Game days lost in large colleges by freshmen-sophomores vs. juniors-seniors.

Summary and Conclusions

The data developed in this investigation were a composite of many varied factors, each influencing the incidence of knee injury in collegiate football. Some of the selected factors were found to be non-significant at the selected level when analyzed by themselves, but compounded to become highly significant when tested in combination with another variable. Conclusions from this study must be the result of analyzing the factors in combination, as well as individually.

The following conclusions seem to be justified.

1. The investigation, when compared with related studies, indicated differences between college and high school football injury were related to maturity, experience, training procedures, and preventive care.
2. Circumstances of injury can be classified and the high incidence areas point up the fields for concentrated effort in prevention and reduction of knee injury.
3. The quarterback and center positions offensively, together with the middle guard and safety positions defensively, were the safest from knee injury.
4. The halfback and end positions offensively, plus the corner linebacker and end defensively, were the most prone to knee injury in football competition.
5. Game injuries were more severe than the injuries of practice as indicated by days lost from participation.
6. Major knee injury was more apt to involve the cartilage and ligaments than any other knee injury classification.
7. The predominant trend in football off-season training programs was a weighted exercise program.

8. The geographic location of a college or university, the enrollment, and the weight and somatotype of the participants had little or no influence on the cause of football knee injury.

9. Weather and multiple sports participation was not important as a contributing factor in this study, but an investigation of another season or study involving high school participants might produce different findings.

10. The chance occurrence of a broken knee in football participation was practically nil.

11. School policy with regard to the following factors was significantly important in curbing and preventing football knee injury:

a. Freshman eligibility
b. Training status
c. Physician's status
d. Spring practice
e. Scholarship program
f. Training table provisions.

12. The control of knee injury in intercollegiate football competition was dependent upon the following variables in combination:

a. Head coach responsibility vs. multiple sports participation.
b. Assistant coach responsibility vs. multiple sports participation.
c. Off-season training program vs. multiple sports participation.
d. Staff size vs. squad size.
e. Academic responsibility vs. coaching responsibility.
f. Physician and trainer status vs. freshman eligibility.
g. Spring practice—freshman eligibility—physician and trainer status—head coach responsibility—assistant coach responsibility.

13. Preventive strapping and taping, physician and trainer status, year of participant in school, and coaching responsibility were highly significant as individual factors in influencing and contributing to football knee injury.

14. In comparing large colleges and universities to the smaller classification of colleges, there was a significant difference between the number of institutions allowing freshmen to participate in varsity competition, provision for full-time physician and trainer, training table, and spring practice.

Recommendations

The following recommendations, based upon the analysis of the factors tested in the study, seem to be warranted.

1. A complete medical examination should be mandatory at the beginning and again at the end of the football season.

2. It is recommended that a physician or a trainer be in attendance at all practices and games. The physician should be the final authority regarding the readiness of the injured participant for resumption of competition. The physician, trainer, and coach should work as a coordinated team.

3. Educational institutions with football programs should make provisions for a full-time qualified trainer.

4. Educational institutions should keep policies which influence or control athletic injury consistent by participating with institutions of equal competitive standards and situations.

5. Revision of rules seems justified in light of the high incidence of injury in games, pile-up injuries, and injury cases occurring during kickoff and punt situations. Third quarter game injuries may indicate inadequate warm-up time at the half of the contest.

6. Evidence collected established that most cartilage and ligament injuries of the knee occurred when the heel was firmly planted on the ground. Study should be made regarding the need for, or at least the size and shape of, heel cleats.

7. The following are highly recommended to discourage the occurrence of knee injury in football:
   a. Adequate preseason conditioning program
   b. Year-round off-season training program, including weight training
   c. Specialized bench exercise for the knee and leg
   d. Abstinence from deep knee bends or duck walk exercises.

8. The results of this study have indicated the need for further research, as follows:
   a. Further study of those factors found to be close to significance at the selected level, especially if done in a high school investigation.
   b. More research is needed which involves the fundamental skills of each position, offensively and defensively, with particular attention to the end position.
   c. The areas of multiple coaching responsibility and practice time limitations merit attention.

EFFECT OF INITIAL CARDIOVASCULAR CONDITION, TYPE OF TRAINING PROGRAM, AND FREQUENCY OF PRACTICE UPON CARDIOVASCULAR DEVELOPMENT[1]

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Northwestern State College

It was the purpose of this study to determine the effect of initial cardiovascular condition, type of conditioning program, and frequency of training upon the gain in Harvard Step Test scores of college men. An effort was also made to determine the effect of the various training programs upon proficiency in the activity engaged in during the study.

The subjects for this study were 240 college men from the basic physical education classes at Louisiana State University, Baton Rouge, Louisiana. All subjects were randomly selected. Two basic groups were formed, one doing isometric exercises and the other engaged in running activities.

The subjects were given a battery of tests at the beginning and end of a seven-week experimental period. All subjects were given the Harvard Step Test to measure cardiorespiratory condition. Those subjects participating in isometric exercises were administered three strength tests consisting of the bench press, leg extension, and leg curl. The students participating in the running program were given a running test of 60-sec. duration. Following the initial administration of the Harvard Step Test, students were divided into above and below average groups in reference to the median score. Twelve experimental groups of 20 subjects were established according to the three variables considered.

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[1] Tables and charts may be obtained from the author.

Students participating in the isometric training program of the study played golf while those in the running program were enrolled in tennis classes. With the exception of the training programs performed by the experimental groups, no other exercises or body building programs were used.

The results of the initial and final tests were used to determine gain in Harvard Step Test scores. The mean gains for the experimental groups were computed and analyzed by a three factor analysis of variance. A factorial design which allows the between-groups sum of squares to be partitioned into three main effects and four interaction effects was used in this analysis. The three main effects were: (a) initial cardiovascular condition, (b) program of training, and (c) frequency of performance. The interaction effects were the various interactions of the three variables mentioned above. The results of this analysis are summarized in Table 1, and a further examination of the results is possible through the use of the charts.

Based on the statistical analysis the results of this study seem to justify the following statements.

1. As measured in this study, there was no significant difference in the effectiveness of an isometric contraction exercise program and a running program of training in developing cardiovascular condition.
2. Individuals in below-average cardiovascular condition tend to gain more than those in above-average condition, but, during the period of study, the below-average group did not obtain the physical condition of the above-average group.
3. Improvement in cardiovascular condition, as measured in this study, increased as the frequency of practice periods increased.
4. Strength and running performance are directly related to frequency of practice periods within the limitations of this study.

PHYSICAL ACTIVITY AND BODY COMPOSITION: FITNESS AND FATNESS

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University of Kentucky

The Kentucky Physical Fitness Experiment[1] was designed to evaluate a variety of effects of 5 months' daily physical training upon adolescent children. The exercise program consisted of calisthenics, apparatus gymnastics, track and field activities, weight lifting, swimming, games, and dancing. One of the studies conducted during the experiment was concerned with an estimate of changes of body composition due to training. The computations were based upon the correlation between skinfold measurements and hydrostatic weight.

Significant decreases of excess fat and significant increases of active tissue were found at the conclusion of the training experiment. No corresponding changes were noted in the control group. The percentages of body fat loss were greater than those for gains of active tissue. Since the body contains more active tissue than excess fat, mean weight remained constant. In computing our data the relevant anthropometric changes due to growth during the period of the experiment were extrapolated.

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[1] The methods used in the Kentucky Physical Fitness Experiment have been described in detail in Dr. Jokl's book *Nutrition, Exercise and Body Composition*, Springfield, Illinois: Charles C. Thomas, 1964.

The girls' performances in two exercise tests, weight lifting and a combined speed and skill event, showed highly significant improvements. After the conclusion of the training experiment most of the girls were as good or better than most of the untrained boys. The improvements of the girls' physical efficiency with training may be considered a functional equivalent of the tissue changes under reference. We are presently computing the girls' physical performance gains with a view to correlating them with the concommitant changes in body composition. It will thus be possible to say how far excess fat exerts an inhibitory effect upon physical efficiency.

In order to evaluate the effect of physical training upon performances of growing children, it is necessary to refer to grids of performance growth equivalent to those now available on physical growth. The former are as necessary for the evaluation of functional determinants of growth as the latter are for the evaluation of anthropometric determinants of growth.

Performance grids differ from growth grids; e.g., of height, weight, body fat, or lean tissue, and from other anthropometric parameters. They allow identification of a number of functional trends which reflect secondary sex characteristics that have no morphological equivalents. For example, endurance declines in untrained girls after age 14 while it continues to increase in untrained boys after this age. Growth of strength follows the same pattern of progression in boys and girls. Differential trends and scatter, as well as overlapping of fields for boys and girls at various age levels, are in evidence if performance distribution is plotted in large samples of boys and girls. However, the inherent limitations of the quantitative approach to the study of physical efficiency must be kept in mind. As an example, the 600-yd. running times of the 14-year-old girls in the test under review were better than those of girls aged 10; but the latter were less fatigued after the race than the former. The 6-year-old girls did not look upon the race as strenuous, while the girls aged 18 found it exhausting.

The extent to which physiological growth changes modify physical performances was shown in an experiment with two groups of 13-year-old girls, the one post-, the other premenarcheal. The former were taller, heavier, and fatter; their performances better in the shotput but poorer in the 600-yd. race; the discrepancies being equivalent to 1½ years of mean growth between 12 and 14.

We have analyzed the results of 1,514 tests of strength, speed, and endurance with boys and girls who were divided into three groups, normal weight, underweight, and overweight. The heaviest children were strongest but had least endurance. The relationship between physique and the performances under review is demonstrable most clearly with highly trained subjects in whom the general inhibitory influence upon physical efficiency of excess fat is eliminated. The average weight of the six best male shot putters at the Olympic Games in Rome in 1960 was 111.0 kg. as against 61.8 kg. for the six best marathon runners; and 89.2 kg. for the six best women shot putters as against 58.5 kg. for the six best women middle-distance runners.

Finally, there is a need to arrive at a system of notation of exercise movements such as in calisthenics, apparatus gymnastics, swimming, games, etc., which differ categorically from those customarily employed in physiological laboratory surveys; e.g., running the treadmill, riding stationary bicycles, or operating other ergometric devices. Appropriate beginnings have been made in choreography and music.

COMPARISON OF ATHLETES AND NONATHLETES ON SEVERAL FITNESS VARIABLES[1]

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Oklahoma State University

The purpose of this study was to determine if there were any differences: (a) between varsity athlete physical education majors and nonvarsity athlete physical education majors in motor ability, grip strength, and vital capacity; and (b) between varsity athletes participating in various sports on these same measures.

Procedure

The subjects, who will be referred to as athletes and nonathletes, were 296 physical education majors at Oklahoma State University. They were all students enrolled in a professional activity class at the time of testing. The tests, which were administered by the author, were given during the first week of school in the fall over a period of six years. To be classed as a varsity athlete, a subject had to be on an athletic scholarship or to be an active participant on a freshman or varsity team for one entire season. All others were classed as nonathletes. According to this classification system, a total of 194 nonathletes and 111 varsity athletes were included in this study.

The tests used were the Barrow Test of Motor Ability for College Men, the grip strength for each hand using a hand dynamometer, and a vital capacity test.

The Barrow Motor Ability Test consists of six items: the wall pass, standing broad jump, medicine ball put, zig-zag run, softball throw, and the 60-yd. dash. Each item score is weighted, then combined with the other weighted scores to give an overall motor ability rating.

The two groups, athletes and nonathletes, were first compared on overall motor ability scores, grip strengths, and vital capacity residuals. The athletes were then broken into five sports groups according to their area of participation. These included football, basketball, baseball, wrestling, and track. Mean scores for these groups were compared on general motor ability, each item on the Barrow Motor Ability Test, grip strength, and vital capacity residuals. Analyses for differences between group means was made using the technique for unequal groups.

Results

There were no significant differences between athletes and nonathletes on general motor ability, grip strengths, or vital capacity residuals.

Among groups of athletes, the wrestlers were significantly lower than track, football, and baseball groups on general motor ability scores (5 percent level). There were no significant differences between groups of athletes on any single item of the Barrow Test. The wrestlers had the low group mean on five of the six items of the Barrow Test. There were no significant differences on grip strengths.

The wrestlers were the highest group on vital capacity residuals, and both they and the track and baseball groups were significantly superior (1 percent level) to the football and basketball groups.

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[1] Tables may be obtained from the author.

Conclusions

1. There were no statistically significant differences between varsity athletes, physical education majors, and nonvarsity physical education majors on general motor ability, any single item of the Barrow Motor Ability Test, or strong and weak grip strengths.

2. The varsity athletes as a group scored higher on general motor ability, each item of the Barrow Motor Ability Test, and strong and weak grip strength scores. The nonathlete physical education majors scored slightly higher than the athletes on vital capacity residuals.

3. As a group the wrestlers were lowest on general motor ability scores, being significantly lower at the 5 percent level of confidence than the football and track groups.

4. The wrestlers were the highest group on vital capacity, and together with the track and baseball groups, evidenced statistical superiority at the 1 percent level of confidence over the football and baseball groups.

EFFECT OF DAILY FIFTEEN-MINUTE PERIODS OF CALISTHENICS UPON THE PHYSICAL FITNESS OF FIFTH-GRADE BOYS AND GIRLS

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University of Detroit

The purpose of this study was to examine the assumption that 15-min. daily periods of calisthenics is sufficient to influence the physical fitness of elementary-school-aged children.

Subjects for the study were fifth-grade boys and girls, students of two heterogeneously organized self-contained classrooms. One class served as the control group (schoolwork as usual—no physical education classes), while the other served as the experimental group (schoolwork as usual—except daily 15-min. periods of calisthenics for 17 weeks).

Physical fitness was determined by the AAHPER Youth Fitness Test. Pre-experimental administration of the test revealed no statistically significant differences between groups in age, height, or weight or on any of the items in the test battery.

Results

1. Within the control group, statistically significant improvements were revealed as follows:
   a. Boys—shuttle run.
   b. Girls—pull-ups, sit-ups, shuttle run, 50-yd. dash, soft-ball throw.

2. Within the experimental group, statistically significant improvements were revealed as follows:
   a. Boys—shuttle run, 50-yd. dash, softball throw.
   b. Girls—shuttle run, 50-yd. dash, 600-yd. run-walk.

3. Examination of post experimental data between the control and experimental groups, both boys and girls, revealed no statistically significant differences on any of the test items.

Conclusion

In this study, 15-min. daily periods of calisthenics nad little or no effect upon the physical fitness of fifth-grade boys and girls as measured by the AAHPER Youth Fitness Test.

RELATIVE EFFECTIVENESS OF EXERCISE PROGRAMS FOR THE DEVELOPMENT OF ENDURANCE IN ARM AND SHOULDER GIRDLE MUSCLES

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Great importance has recently been placed on physical fitness programs across the country. Most of these programs are based on some form of testing where a standard must be attained. This may involve a pass or fail situation, or it may involve the attainment of certain minimums to reach various arbitrary levels of fitness; e.g., poor, fair, good, very good, or excellent. In these situations, it is important to know which specific programs should be followed in order to obtain optimum effectiveness in achieving the established standards.

The present study was concerned with the development of arm and shoulder girdle strength and endurance. It was an attempt to determine the effectiveness of various supplementary specific exercise programs when used in conjunction with a rigorous sports and general physical education program in the attainment of a set pull-up standard. The study was conducted at the United States Military Academy at West Point where a rigorous sports and general exercise program is followed. All cadets at the Academy must attain an arbitrary standard in the pull-up exercise. Failure to attain this during the upper two class years results in loss of certain privileges.

Methods

All third and fourth classmen who could perform seven or less pull-ups[3] in the regular spring physical fitness testing period were selected as experimental subjects. During the study, which lasted eight weeks, the subjects were tested three times; i.e. a pre-test, a mid-test four weeks later, and a post-test eight weeks after the pre-test. The experimental groups participated in three exercise sessions per week. Only the pre-test and post-test data will be considered herein.

The subjects selected for this study were rated in accordance with height, weight,

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[1] With the assistance of Jay A. Bender, Southern Illinois University; Lloyd O. Appleton, USMA; John B. Kress, USMA.

[2] Tables and bibliography may be obtained from the author.

[3] Seven pull-ups is the actual current performance standard at the Academy.

and the number of pull-ups that they could perform. From within these stratified samples, the subjects were then assigned at random to four experimental groups.

1. Group A was called the isometric exercise group. Its members regularly performed isometric exercises (Appendix I).
2. Group B was called the isometric exercise-weight training group. This group performed the same isometric exercises as did Group A, followed by a weight training program (Appendix I).
3. Group C was called the weight training-pull-up group. This group performed the weight-training program and the pull-up program (Appendix I).
4. Group D was called the control group. The members of this group did not do any strengthening or heavy endurance work of the type which might significantly affect their arm and shoulder girdle strength and endurance during this study.

In addition to specific exercises within the various groups, all cadets in the study participated fully in the vigorous daily varsity and intramural sports activities and the physical education programs at the Academy.

Results

STATISTICAL ANALYSIS OF MEANS

The frequency distribution of the pre-test and post-test data and the analysis of the mean gains by use of the student test are presented in Table 1. All four groups had a significant increase in the mean number of pull-ups performed at the final test when compared with the initial test.

Analysis by covariance methods showed that Groups B and C had a significantly greater increase than did Group D (control) in the mean number of pull-ups achieved. Group A showed a nonsignificantly greater tendency to increase than did Group D. The gain in Group C was significantly greater than that in Group A.

ANALYSIS OF PASSES AND FAILURES

The number and percentages of those who failed and those who passed the prescribed standard in both the pre-test and the post-test are presented in Table 2. Analysis of these data by the use of the chi square test on the basis of pass-fail categories indicated the following.

1. Group D (control) had a significantly greater number of cadets fail the post-test who also failed the pre-test than did the other groups.
2. There was no significant difference among the three exercise groups in the number of cadets who failed the pre-test but who passed the post-test.
3. Group C had a significantly greater number of cadets pass both the initial and final test than did the other groups. The statistical analysis revealed that this group was not entirely equal to the other three groups at the start of the experiment since it had significantly fewer pre-test failures. Although this must be taken into account in any subjective interpretations which are made, the difference was mathematically equalized in the statistical analysis.

Discussion

Although all four groups showed significant gains in pull-up achievement, the control group had significantly less success than the other groups in the numbers of initial failures who could be elevated to successful performers. This indicates that the exercise programs used for Groups A, B, and C are all potentially applicable to attain success in pull-ups where a standard must be achieved. More generally speaking, any specifically relevant and consistently applied exercise program will be more successful in raising the maximum number of failures to a successful level in a specific task than will the lack of such an exercise program, even though a generalized, vigorous sports and exercise program is being pursued.

It is impossible, from the present data, to pinpoint a single exercise method that may produce the most effective results in the pull-up activity. Although Group C had the highest significant mean gain of any of the groups in increasing the number of pull-ups achieved, its gain was not significantly greater than that of Group B. Furthermore, in turning from mean gains to pass or fail categories, there was no significant difference among programs A, B, and C in the attainment of the basic standard. This can be interpreted to indicate that although some of the programs were more effective in increasing the average number of pull-ups among the better chinners, they were not as effective in enabling the lower ones to attain the standard.

Conclusions

A specifically directed exercise program is required to attain greater success in passing a specific requirement, even in the presence of a rigorous sports and general exercise program. This special exercise program, however, must be accurately designed to work the muscle areas involved in the given task.

Where a good general physical conditioning program exists, either isometric or movement resistance exercises may be equally effective in developing the necessary muscular endurance to attain a set of standards of achievement where the body weight must be handled.

Interpretations

To date, there is little evidence that isometric exercises can increase endurance. However, the data indicate that isometrics may be effective if used in addition to an environment of a rigorous physical education and intramural program.

The weight training program with the chinning exercises added caused those who could chin fairly well, to chin more, but it did not aid to a great extent those who were low in chinning ability. The isometric exercises, however, did seem to help those cadets who were low in chinning ability.

The data strongly indicates that we cannot rely on a general physical conditioning program to develop a specific task such as chinning, but specific exercises have to be given to achieve success.

Appendix I

EXERCISE PROGRAMS

Isometric Program

1. Elbow flexion—palms pronated—2 points 90° and 180°.
2. Arm depressions (2 points)
   (a) Straight above head.
   (b) Forehead level.
3. Scapular adduction, squeezing shoulder blades together with resistance.
4. Shoulder shrugging, one point.

Exercises were manual with subject attempting to use full force on each contraction. Three 6-sec. contractions with a 4-sec. rest between each contraction were used.

Pull-Up Program

From the maximum number of pull-ups accomplished, two pull-ups were subtracted to establish a guide number. Three sets of that guide number were practiced each session for the first two weeks, then one pull-up was subtracted to establish a new guide number for the following two-week exercise sessions. A new maximum number of pull-ups was established at the midway retest and the above procedure was duplicated for the second four weeks.

Weight-Training Program

1. Reverse elbow flexion curl with bar bell.
2. Arm depression—Latissimus Dorsi Machine
   (a) Arms straight
   (b) Arms bent—bar in front of chin
   (c) Arms bent—bar behind head.
3. Scapular adduction, lateral backward arm raises with dumbbells.
4. Shoulder shrugging with bar bell.

Weight load.

(a) That which could be correctly handled through 6 repetitions.
(b) Weight was added when the cadet could do 8 repetitions correctly.

During the first three weeks, one bout of each exercise was used. After the first three weeks, two bouts of each exercise were used.

TRENDS IN PROFESSIONAL PREPARATION FOR PHYSICAL EDUCATION IN THREE DISTRICTS OF THE AAHPER[1]

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Three doctoral dissertations by Syverson, Daugherty, and Pearson were written at the University of Oregon under the direction of Ralph Leighton in 1951 and 1952 after visits made to 96 colleges in the Northwest, Southwest, and Central Districts of the AAHPER. Both private and public institutions were included in the study. Following these studies a pamphlet was published to summarize the findings in the three dissertations. In 1955, a questionnaire was sent in a follow-up study to each of the 96 colleges in the original project for the purpose of determining recent changes in the physical education major program and in 1961 a third study was completed concerning the same colleges. Of these colleges, 86 percent responded to a questionnaire survey in 1955 and 100 percent responded to a third study (six colleges dropped their major program in physical education between 1951 and 1963).

Purpose

The major purpose of the 1951-52 study was to determine the status of physical education in colleges preparing physical education majors. Specifically, the purpose of the 1951-52 study was to determine for each institution:

1. The type of administrative organization.
2. The number and type of degree or degrees granted.
3. The number of men and women enrolled in the professional preparation program.
4. The number of men and women physical education major students graduating in the 1950-51 school years.
5. The term hour range and mode, and average term hours for practice teaching.
6. Selected factors pertaining to practice teaching.
7. Where, and for how long, practice teaching was done.

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[1] Bibliography may be obtained from author.

8. The number and percent of physical education major students doing some practice teaching in areas other than physical education.

9. The rank, degree, and experience of staff members teaching professional physical education courses.

10. The required and elective courses offered in the basic sciences, professional activity courses.

11. The number of different activity courses offered for professional physical education students and the type of course in which they are offered.

12. The number of physical education books and pamphlets, by separate titles, in the library.

13. The textbooks used in physical education subjects.

14. The number and type of teaching stations.

15. The number and type of perishable and permanent equipment.

16. The graduate organization in those colleges offering graduate degrees or courses in physical education.

17. The number of courses for graduates in colleges offering graduate courses in physical education.

18. The term hour offerings in special physical education courses primarily for graduates in colleges offering graduate degrees or courses in physical education and the broad areas in which these courses are offered.

The major purposes of the 1955 and 1963 studies were to report and evaluate current trends in professional preparation in these same colleges. Only factors that could be included in a questionnaire type study were included.

Procedure

Personal observation and interviews are the most accurate and satisfactory method of evaluating a college program. This method was used for the 1951-52 studies (more than 16,000 miles were traveled in visiting 96 colleges). However, because it was not possible for the writer to repeat the personal visits to each college, the follow-up studies of 1955 and 1963 were done by questionnaires. Using questionnaires, it was not feasible to obtain detailed information which appeared in the original study.

Undergraduate Area

ORGANIZATION AND ADMINISTRATION (TYPE ORGANIZATION)

Year of Study	
1951	Of the 96 colleges studied in the three districts of the AAHPER, 65 were organized as departments of physical education, 28 were organized as divisions of physical education, and only 3 as schools of physical education.
1955	Of the 94 colleges studied,[2] 65 had made no changes in administrative organization. There were no significant changes in the number of schools, colleges, divisions, or departments of physical education.
1963	Of the 96 colleges studied,[3] 59 made no changes in administrative organization. Seven colleges changed from a departmental type organization to a divisional plan, and one department became a college of physical education.

ORGANIZATION AND ADMINISTRATION (DEGREES)

1951 Sixty of the 96 colleges offered the bachelor of arts degree and 54 the bachelor of science degree. One college offered the bachelor of physical education degree, and three the bachelor of education degree. Twenty-two of the 96 colleges offered a master's degree and five a doctor's degree.

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[2] Two of the colleges dropped their major program between 1951 and 1955.

[3] Four of the colleges dropped their physical education major between 1955 and 1963.

1955 Nine of the 81 colleges added an undergraduate or graduate degree. Four colleges added the bachelor of arts degree, five the master of arts degree, three the Ed.D. degree and two the Ph.D. degree.

Twenty-one of the 90 colleges added undergraduate and graduate degrees. Five colleges added the bachelor of science degree, four the B.A. degree, five the M.S. degree and 14 the M.A. degree. In the Southwest District 12 of the 34 colleges added the master's degree.

ORGANIZATION AND ADMINISTRATION (PRACTICE TEACHING)

1951 The administration of practice teaching was under the jurisdiction of the department of education in 80 of the 96 colleges.

1955 The responsibility for practice teaching was changed in few colleges. This responsibility was equally divided between the physical education and education departments, or coordinated between the two departments.

1963 Twenty colleges changed to the internship type of practice teaching (living in a school district and teaching there), between 1955 and 1963.

PHYSICAL EDUCATION FACULTY (NUMBER)

1951 Over one-half of the 96 colleges in the three districts studied had fewer than five staff members in the physical education department. Three colleges had only one.

1955 Ninety-one faculty members were added in the 81 colleges: 31 colleges added at least one staff member, 11 added two, and one college added 14. Only one college had a decrease in its physical education staff.

1963 Between 1955 and 1963, 240 faculty members were added to the physical education staffs of the 90 colleges. Eighteen colleges added one staff member and 23 added two staff members. Eight colleges in the Southwest District added 10 or more staff members. One of these colleges added 33 faculty members while another added 24.

PHYSICAL EDUCATION FACULTY (DEGREES)

1951 Of the 558 staff members teaching professional courses, 64 had a doctor's degree, 314 a master's degree, 175 a bachelor's degree, and 5 had no degree.

1955 Eighty-eight staff members were granted a master's and doctor's degree between 1951 and 1955.

1963 Two hundred and thirty staff members were granted a Master's or Doctor's degree between 1955 and 1963.

PHYSICAL EDUCATION FACULTY (RANK)

1951 Of the 558 faculty members, 86 held the rank of professor; 103, associate professor; 136, assistant professor; 142, instructor; and 91 did not have a professorial rank.

1955 There were 129 advancements in faculty rank between 1951 and 1955.

1963 There were 364 changes in staff rank between 1955 and 1963. Two hundred and four of these advancements in rank were in colleges of the Southwest District.

CURRICULUM

1951 The average requirement of each college for professional lecture courses in physical education was 23.20 term hours. This figure is broken down as follows. (a) Average requirement for organization, administration, and program areas was 4.52 hours. (b) Average requirement for history and philosophy was 4.03 term hours. (c) Average requirement for tests and measurements was 1.15 term hours. (d) Average requirement for methods of teaching was 6.39 term hours and for methods of coaching, 7.11 term hours. (e) Average requirement for methods of teaching and methods of coaching combined totaled 13.50 term hours. More than 50 percent of the requirements in professional lecture courses were in the methods area.

In the 96 colleges, the average number of term hours of required professional activity courses was 3.83 and the average number of term hours of required service activity courses was 5.08.

The average number of term hours in required physical education sciences, life sciences, physical sciences, and optional life and physical sciences was 24.56. This figure is broken down into 7.32 term hours in required physical education sciences, 13.44 in life sciences, 2.83 in the physical sciences, and .96 in optional life and physical sciences.

In the 96 colleges studied, the average number of term hours required in health education was 5.23 and in recreation, 2.19.

1955 Half the colleges made some changes in their physical education curricular offerings. There was a noticeable increase in the number of physiological science requirements.

1963 Sixty-seven of the 90 schools made some changes in their curricular offerings. About 25 percent of the colleges completely reorganized their curriculum. Eleven of the colleges added a course in tests and measurements in physical education, and 30 colleges added at least one physical education science course.

Twenty-nine colleges added at least one professional activity course. One university added 9 additional activity courses as part of its requirement for a major.

BUILDINGS AND FACILITIES

1951 It was found that about 33 percent of the colleges had swimming pools, about 40 percent had weight rooms, about 30 percent had corrective rooms and all of them had at least one basketball court as a competition floor, utility gymnasium, or as a separate teaching station. Sixty-four percent of the colleges had outside utility fields, 95 percent football fields and 96 percent had at least one tennis court.

1955 About 50 percent of the 81 colleges added one or more physical education facilities between 1951 and 1955. Fifteen built new gymnasiums, 23 utility rooms and 34 utility fields, and four added a field house to their physical education plant.

1963 Eleven of the 90 colleges built new physical education plants (gymnasium, swimming pool, locker rooms, utility fields, utility rooms, tennis courts, football fields, baseball field, track, etc.); of the 11 colleges, 9 were in the Southwest District.

About half of the colleges added one or more facilities to their physical education plant between 1955 and 1963. Fifteen colleges added gymnasiums, 13 added swimming pools, and 10 built a new field house. Since 1951, at least 25 colleges in the three districts have added a major program in physical education, and two of them offer a graduate degree.

Graduate Area

ADMINISTRATION (ADMISSION AND COURSE REQUIREMENTS)

1951 It was found that 22, or 100 percent of the colleges offering a graduate degree, required that the student have an undergraduate major in physical education, or make up specific required undergraduate physical education courses. All 22 colleges required the physical education major students to fulfill general college admission requirements. An evaluation of individual transcripts for admission was required by all of the colleges. Nineteen of the 22 colleges required 45 term hours for a master's degree, while two required 48 and one required 42.

Of the five colleges that offered the doctor of education degree, three required 135 term hours and two required no specific number of term hours. In these two colleges, an evaluation of the candidate's transcript and teaching experience was made to determine the number of term hours to be required. Three institutions offered the doctor of philosophy degree in physical education. All three required 135 term hours.

Four of the 22 colleges required approval by the physical education department at the end of the first term and approval of the dean of the graduate school and director of physical education for admission to graduate candidacy for the master's degree. Six institutions required only the approval of the physical education department at the end of the first term. Twelve of the 22 colleges required the approval of the dean of the graduate school and the director of physical education.

The term hours required for the master's thesis ranged from 2 to 15. One of the five colleges granting doctor's degrees required a dissertation, with 30 term hours of credit given; one, 15 hours; and three, no term hours.

1955 Between 1951 and 1955, 11 colleges added a graduate degree in physical education. All of the 26 colleges offering a graduate degree in physical education required that the candidate have an undergraduate degree in physical education and also meet general admission requirements. There were very few changes in admission requirements. Seventy-five percent of the colleges made no changes. Twenty-three of the 26 colleges made no changes in the number of semester or term hours required for graduation.

1963 At the present time about half of the colleges included in the study offer a graduate degree. Thirty-five colleges offer a master's degree and nine offer a doctoral degree. In the Southwest District, 20 of the 34 colleges offer a master's degree and five offer a doctoral degree. Two dropped the master's program and one dropped its doctoral program between 1955 and 1963.

All of the colleges offering a graduate degree require the candidate to have an undergraduate major in physical education, and to meet general college admission requirement. There were very few changes in admission requirements in the 90 colleges. Only seven of the 90 colleges made changes in the number of semester hours required for a graduate degree.

CURRICULUM

1951 Term hour offerings in special physical education areas primarily for graduate students ranged from 12 to 120. Only three colleges offered more than 50 term hours and only 11 offered more than 25 term hours, including the master's thesis and doctoral dissertation. Only one of the 22 colleges offered more than nine term hours in each of the special physical education areas (history and philosophy, research and evaluation, corrective physical education, physiological science, child growth and development, organization, administration, supervision and program, aesthetic phases, master's thesis, and doctor's thesis). A second college offered more than nine term hours in five special physical education areas. Only ten of the 22 colleges had two or more special physical education areas with nine or more term hours in graduate offerings primarily for graduate students. Four colleges had no special physical education area offering nine or more term hours.

1955 There were very few changes or additions in curricular offerings between 1951 and 1955. Only eight colleges added or deleted a graduate course.

1963 Eighty-six graduate courses were added to the curriculum in the 43 colleges offering a graduate degree. There seems to be a trend toward requiring more courses in the areas of physiological science, and of organization, administration and program.

STAFF (RANK, NUMBER, DEGREE)

1951 In the 22 colleges granting a graduate degree, the rank of associate professor was represented most often on the graduate staff.

The largest number of teachers on the graduate staff for any college was 12, and the smallest number two. Fifteen of the 22 colleges had fewer than five teachers on their physical education graduate staff.

In the 22 colleges there were 50 graduate staff members who had a doctor's degree, 50 who had a master's degree, and four who had only a baccalaureate degree. Only four of the 22 colleges did not have a staff member with a doctoral degree. One college had twelve and another had eight staff members with this degree.

The 22 colleges granting a graduate degree in physical education had a total of 99 staff members. All but four of these faculty members had taught in the elementary or secondary schools.

1955 In the 26 colleges, 22 staff members were added to the graduate faculty. Of these, 18 were added in the 16 colleges of the Southwest District.

1963 In the 43 colleges offering graduate study in physical education, 27 added at least one staff member to their graduate faculty. Twenty-five members in nine colleges of the Central District were added to the graduate faculty, while only three staff members were added to the faculties in the Northwest District.

Generalizations

It is generally recognized by authorities in the field of higher education that the greater the degree of independence of an academic unit in planning curricula, courses, etc., the better the opportunity for high grade professional preparation. The divisional plan, which affords this independence, is replacing the departmental plan in many colleges. This trend is particularly noticeable in the state colleges of California.

The quality of professional preparation in the three districts has been greatly improved. More courses in liberal arts and basic physiological sciences are required; and fewer courses are required in the nonacademic type of offerings.

In the colleges studied, there has been an increase in the number of physical education staff members granted academic rank. Since colleges and universities have recently placed more emphasis on higher academic degrees, approximately 50 percent of the physical education faculty in the colleges earned a master's or doctor's degree between 1951 and 1963.

Numerous new buildings and facilities have been added to the campuses. Eleven of the 90 colleges built complete new physical education plants (gymnasium, swimming pool, locker rooms, utility fields, tennis courts, etc.) and 30 additional colleges built new gymnasiums and locker rooms. This would seem to indicate that physical education is advancing and developing at an equal rate with other subject areas.

Between 1951 and 1963 the number of colleges offering a graduate degree was doubled, and there was a 40 percent increase in colleges offering a doctor's degree. Because of the state requirements and higher standards there is increased demand that colleges offering the professional major in physical education add a graduate degree.

There is a wide range in the quality of professional preparation. Many of the state universities, state colleges, and large private universities have excellent programs and some of the smaller private colleges have outstanding programs. However, about 30 percent of the colleges studied would fall far below the recommended standards of the recent Professional Preparation Conference. If these colleges intend to continue to offer a professional major in physical education it would benefit the profession if steps were taken to meet at least the minimum requirements of the Professional Preparation Conference.

RELATIONSHIP BETWEEN WRITTEN TEST SCORES AND PERFORMANCE SKILL IN SPORTS[1]

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Over a period of years several instructors who have taught classes in the Physical Education Skills Program for Men at the State University of Iowa have commented that frequently the students who are the top performers in a sports class score low on the written test in that sport; on the other hand the students who are poor or mediocre performers in the sport often achieve a high score on the written test.

The purpose of this study was to determine if, for male college students, a relationship exists between the level of performance skill in sports taught in a required program of physical education, and knowledge of the sports as revealed by scores achieved on written tests.

SUBJECTS

Subjects were 2,642 college students at the State University of Iowa, enrolled in 160 sports classes in the Physical Education Skills Program or elective physical education courses. Approximately 95 percent of the students were enrolled in the required program of physical education and approximately 5 percent of the students were enrolled in elective physical education. More than 90 percent of the students were freshmen.

Data were collected for 22 different sports classes. The number of subjects from which data were obtained ranged from five students enrolled in an Advanced Golf class to 47 students enrolled in an Elementary Volleyball class. The mean number of subjects enrolled in each class was 16.5 students. The smallest number of classes in a sport for which data were obtained was four, and the largest number of classes was 15.

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[1] Tables may be obtained from the author.

SPORTS CLASSES

The bulk of the data was collected in sports classes taught during the second semester of the 1962-63 school year and during the first half of the first semester of the 1963-64 school year. However, data was also collected during the 1960-61 and the 1961-62 school year for four of the sports classes.

The sports classes taught in the Physical Education Skills Program meet twice a week for one half of the semester—about 14 class periods. For those sports classes in which the students dressed in a gym uniform, the class meeting period lasted for 30 min.; for other classes in which the students did not wear special clothing, the meeting period was for 50 min. The students were permitted to elect the six sports classes in which they received instruction while satisfying the requirement in physical education skills. However, in making their selections they were strongly urged to include the following groupings: three carry-over type of sports, one team sport, and one water sport. The students were advised that elementary sports classes were offered primarily for students with little or no skill or experience in that sport. The sports class instructors were instructed to direct students who were skilled in a sport not to enroll in the elementary level class.

During the first sports class meeting of the semester the students were informed verbally and in an information booklet that the following grading procedure was employed for sports classes:

> Your grade for participation in a sports-activity class is determined from a consideration of the following factors:
>
> 1. Your ability, as measured by performance tests or other evaluation devices such as tournaments or instructor's ratings, to execute and integrate the fundamental skills of the sport.
> 2. Your score on written tests covering the rules, etiquette, history, playing area, equipment, and the strategy of the sport.
> 3. Your efforts to acquire skill in the sport (subjective evaluation by your instructor).

The grade received by the student in his sports class was computed in the students' grade point average and the credit granted was counted toward the B.A. degree.

RATERS

The instructors teaching sports classes in the physical education skills program had a minimum of three years of full-time teaching experience. With very few exceptions, the instructors had taught the sport classes from which data were obtained at least five times. Of the classes from which data were obtained, about 25 percent were taught by full-time staff members who had been employed in the department of physical education for men for from two to more than twenty years, and about 75 percent were taught by graduate teaching assistants who had been teaching in the program for from one to three years and who had two to eight years of full-time teaching experience before being appointed as graduate teaching assistants at the State University of Iowa.

RATING OF PERFORMANCE SKILL

In order to obtain a rating of the performance skill of the students enrolled in the sports class, the instructor of the sports class was requested to rank the students on their performance of the skills of the sport. The instructors were given the following directions for ranking the students:

> Consider all of the physical skills that are involved in a complete performance of the skills that comprise this sport. Consider the relative value of each skill and consider the effectiveness with which the student integrates and utilizes these skills. On this basis, rank

as number *1* the student whom you consider to be the most skilled in this class. Rank as number *2* the student whom you consider to be the second most skilled, and continue this procedure until you have ranked last the student whom you consider to be the least skilled in this class.

The instructors were told that if they could not distinguish between the skill performance levels of the students they should assign the same ranking to more than one student.

SPORTS WRITTEN TESTS

With the exception of the test in Red Cross Senior Life Saving, the written test given to the students enrolled in a sport class consisted of approximately 50 questions of the multiple-choice type. For each sport, the written test was constructed on the basis of a test blueprint in which the percentage of questions pertaining to the various areas of knowledge of the sport were listed: questions were constructed to fit the specifications of the blueprint. When applicable, the following areas of a sport were included in the written tests: history, rules, equipment, playing area, offensive strategy, defensive strategy, team formations, mechanical principles underlying the fundamental skills, and the method of executing and integrating the fundamental skills of the sport. The questions and tests were, to the best of the instructors' and this writer's ability, constructed according to the principles recommended by authorities in the field of test construction.

The written tests were answered by the students on regular IBM answer sheets and the answer sheets were hand scored by the instructor of each class. Since 1958 the written tests and answer sheets for the sports classes have been item-analyzed by the University Examination Service and the tests and test items were periodically revised on the basis of the information reported by the University Examination Service.

The information and knowledge represented by the question in the written test were such that the student was required to study both the appropriate chapter of the required textbook and other references extensively in order to score high on the test. The instructors of the sports classes did not lecture on some of the areas included in the written tests during their classes.

The written tests for sports classes were designed to be of sufficient difficulty to spread the scores obtained by the class members. For most of the written tests the mean score was located in the range of 32-36 correct answers, and the number of correct answers ranged from approximately 20 to the low 40's.

SCHEDULE FOR COLLECTING DATA

The sports class instructors were directed to rank the students on their performance of the skills of the sport classes at the penultimate class meeting. The instructors were then directed to record this information on their grade sheets before administering the written test during the last class meeting, and to record the written test score of each student on the class grade sheet which was to be given to the office secretary within three days following the written test period. Those students who had incomplete work or who failed to take the written test within three days of the regular date were eliminated as subjects for this study.

Analysis of Data

In order to eliminate unequal class size as a variable in the ranking of the performance skill of the students in each class, the class rank for each subject was converted into a percentile rank, which was computed to the nearest whole number.

The reliabilities of the scores on the written tests were computed by personnel at

University Examination Service who used the Amgoff revision of the Kuder-Richardson 8 formula.

The coefficients of reliability for the written tests ranged from .49 to .81, with most of the r's being between .60 and .80. However, coefficients of reliability were not available for seven of the sports written tests.

Through the use of a SCM Marchant Deci-magic Calculator, zero-order r's were obtained by *the machine method of computing product-moment coefficients of correlation.* Since only one instructor ranked the sports performance skills of the subjects in each class, the reliability of the rankings was not computed. The procedure of using a single rater was followed since this duplicated the usual instructional situation in which the students normally are evaluated only by their class instructor.

Results

For each of the 22 sports, the number of subjects and classes on which correlation coefficients were computed, the coefficients of correlation between written test scores and rankings of performance skills, and the level of significance of the computed coefficients of correlation are shown in Table 1.

The 22 sports classes were categorized into one of three categories—individual sports, dual sports, and team sports—and coefficients of correlation were computed between the combined written test scores and the rankings of performance skill. The coefficients of correlation obtained were as follows:

Sport	N of Subjects	N of Classes	r	P
Individual Sports (13 sports)	1418	96	.188	.01
Dual Sports (5 sports)	743	39	.160	.01
Team Sports (4 sports)	481	25	.203	.01

Discussion and Conclusion

The findings of this study indicate that a small, positive relationship appears to exist between the scores achieved by male college students on written tests covering the areas of knowledge commonly contained in sports instructional books and their ability to perform the skills of the sports. While this relationship is statistically significant, it is too small to be of much value for predicting performance in one variable on the basis of performance in the other variable.

The low relationship between written test score and performance skill apparently indicates that, if knowledge of the sport is one of the objectives of a college instructional program in physical education, the students should be specifically evaluated and graded on their knowledge of the sport, since this apparently cannot be predicted on the basis of their skill performance ability. It appears that some students may understand what skills and knowledges are needed to perform successfully in a sport but lack the physical qualities to utilize this knowledge and understanding successfully.

Recommendations

It is recommended that studies similar to the present one be conducted with the following qualifications: (a) the contents of the sports written tests should include only questions related to the performance of the skills and the strategy of the sports; (b) outside readings should not be assigned to the students but instead the areas and information covered in the written tests should be presented verbally by the instructor during the class meetings, and (c) written sports tests and rankings of performance skill for which high reliabilities have been demonstrated should be utilized.

intercollegiate athletics

INTERCOLLEGIATE ATHLETICS FROM THE NAIA VIEWPOINT

A. O. DUER
National Association for Intercollegiate Athletics

We are living in an age of crisis. Perhaps this is the single most distinguishing characteristic of our time. The international conflict between freedom and slavery affects the lives of people over the entire world. Never in the history of man has a single conflict of idealogies so involved all the world's nations. The building of the "wall" to separate peoples within a city, the constant cold war which is likely to break into a hot war at any moment in any of a dozen world areas, the installation of a "hot line" between Moscow and Washington to avoid the accidental self-destruction of mankind, and the building of an armed camp in Cuba, a country literally on our doorsteps—all these and many other psychological pressures make this particular time in history a critical period in our lives, not only in this country but also for all peoples throughout the world.

Never since the War Between the States have social conditions in our country been so tense and critical. A similar state of social tension exists throughout much of our world. Relationships which have existed between people for generations are being challenged to the extent that actual physical force and violence is generated in answer to the emotional conflict with the traditions of our world.

One of the great historic novels dealing with the French Revolution began with these words: "These are the best of times and the worst of times." This statement might also be accurately used to describe our times.

We have (a) the highest standard of living ever dreamed of by man; (b) a tremendous increase in leisure time; and (c) scientific developments never dreamed of which have become common to our age. Yet never has the average man been under such constant pressure in seeking some answer in his search for purposeful living. It sometimes appears our society will disintegrate under the pressures of a life, which involves:

- Fear of atomic war. At the time of the Cuban crisis this fear reached a peak of reality.
- Divorce rates which increase year by year.
- The rapid increase of mental and physical illnesses. Approximately 20 million people are in mental institutions; one in every four Americans will be hospitalized during this year.
- Race tensions and prejudice which are at an all time high, not just in America but throughout the world. "Africa for Africans," "Yankee, go home," only serve to indicate the universality of this problem which is so crucial in our own land.
- Crime which fills our daily papers—not just juvenile delinquency, but adult delinquency as well, which is really the heart of the matter.

Recently an organization doing a survey on juvenile problems called 50 homes to see if they knew where their children were. In four of five cases they found the children home with a baby sitter who did not know where the parents were.

Changing World

I well remember a course I had at Columbia University in my undergraduate days under one of the greatest teachers of all times, Dr. William Heard Kilpatrick. The theme of this course was "Building a good life in the midst of constant change." Change is not new, nor are internal and international crises; however, the effect of these constant crises upon the individual have been magnified to cause a serious weakening of our idealism, and the moral and ethical strength of our society. This breakdown in our national integrity and purpose is being noted by leaders in all areas of our nation.

A free society cannot be maintained by sharpness of political acumen or by power of atomic bombs, but is directly dependent upon the strength of our national character, which is in turn dependent upon a citizenry dedicated to the high ideals of freedom and justice. Dedication to common ideals, wh[illegible] supported by the highest moral character within our leadership and citizenry, gives strength and unity to the family, community, or nation. Our way of life is directly dependent upon our ability to instill the highest ethical and moral excellence in our youth—for they will be the leaders and citizens of tomorrow. If we fail in this challenge, we will surely lose the wisdom and dedication to our ideals necessary to our survival. This, we believe, is the greatest challenge of our time. The history of nations clearly indicates they rise or fall, not by force of arms, but by inner decay from the loss of ethical and moral strength.

The Significance and Responsibility of Athletics

Let us examine our modern athletic trends to determine whether we are fulfilling our responsibility in instilling the highest ethical and moral character in our youth. No one can doubt that sports have an unprecedented influence in our society, both in participation and in the interest of the general public. Ex-President Hoover, in a public statement a few years ago, said that athletics were second only to religion as a force for instilling democratic ideals in our youth. J. Edgar Hoover has stated many times that athletics are the finest experience for instilling sufficient character and idealism in our youth in order to combat the rising tide of delinquency and crime. However, he added that if sports competition is to do this, it must emphasize high ethical practices and ideals.

I remember a brief quotation which stresses this point, "Greeting his pupils, the master asked, 'What will you learn of me?' and the reply came, 'How shall we care for our bodies? How shall we rear our children? How shall we live together? For what ends shall we live?' and the teacher pondered these thoughts and sorrow was in his heart, for his own learning touched not these things."

I believe we must reevaluate our athletic program to bring a change of emphasis of values.

OVEREMPHASIS OF WINNING TO THE SACRIFICE OF MORE IMPORTANT VALUES

The extreme emphasis upon winning in today's sports world threatens to crowd out all other sound values. In too many instances the idea of winning at any cost and breaches of ethical practices are excused if the individual or team is a "winner."

Fortunately, intercollegiate sports still present a positive influence on both those who participate and spectators who become emotionally involved. However, this is largely due to the chance leadership of an individual coach or administrator, rather than to a planned emphasis given to this area through athletics as a whole.

Under the pressure to win, high skill becomes the prime requisite expected of an athlete and serious breaches of ethical practice or academic sufficiency are likely to be handled with greater sympathy if the athlete is a star. Seldom do we hear such words as "sportsmanship" and "fair play" in today's athletic world. In fact, the coach is likely to mention the term sportsmanship only when he has had a losing season by saying, "This year we are teaching character."

It is natural and wholesome that the athlete should go all-out to win every contest he enters. In fact I would be worried about a boy who would not do so. It is also natural that the coach should gear his program to winning. This is concomitant to being a good coach. However, if the coach, the athletic director, or the college president classifies winning as the most important measure of success, we have lost our way in the emphasis of values.

JUDGING SUCCESS OF THE PROGRAM ON COMMERCIAL-PUBLICITY VALUES

A Frenchman once said, "The three Gods of America are money, power, and fame. Americans call this 'success.'" We believe this emphasis upon money and things has a direct bearing on our loss of ethical and moral strength and is a major factor in the misdirection of the emphasis from sound values in athletics.

One of the truisms of life is that the most difficult thing for us to adjust to successfully is an overabundance of success in any form. Financial success seems especially damaging to the human personality and the attempt to keep a balance of values.

We believe that the maintenance of a broad and sound program should in no way be limited to the gate receipt income. We recommend to our college presidents that they take the same responsibility for financing a sound athletic program as they do for financing a sound science program.

We believe it is good that intercollegiate athletics have sufficient appeal to the public to have a potential for good public relations and publicity. However, policies guiding the program should not in any way be geared to the use of athletics for publicity in other than the normal channels and in publicizing values which have sound educational significances.

Because of our convictions about these emphases we are, at this time, instituting a program on the influence of the "Conduct of Intercollegiate Athletics" on all areas of the athletic program. This program will give emphasis to such matters of conduct as:

- Conduct of coach on bench
- Treatment of officials
- Crowd conduct
- Visiting teams treatment
- Faculty-student body conduct.

PROFESSIONAL SPORTS INFLUENCE ON INTERCOLLEGIATE SPORTS

We are all conscious of the tremendous surge of professional sports in America. Apparently every community of any size will soon have at least one professional sports team and our metropolitan cities now have as many as three or four.

It is not my purpose here to debate the merits of professional sports. I am concerned, however, with the growing influence they are exerting on all levels of our amateur, and more especially our educationally centered, sports programs. We who have the responsibility for intercollegiate sports are in danger of gearing our programs to serve the needs of professional sports.

Professional sports is a business and makes no pretense of fulfilling the role which interscholastic and intercollegiate sports must support in order to justify their acceptance as a part of the educational program. The history of sports clearly indicates that when a society becomes extremely commercial with a high-level economy, professional sports become most attractive. The history of nations also proves that a society which becomes saturated with professional sports, at the expense of the amateur spirit and the personal qualities which are necessary to support a strong amateur program, is in danger of losing the basic ideals necessary to the support of a free society.

It is unfortunate that professional sports are able to use the existing tremendous interest in interscholastic and intercollegiate sports to support their programs. Many are not aware that the aims of professional and amateur sports are so diametrically opposed in their contributions to our society as to be in almost direct conflict.

The responsibility for maintaining our intercollegiate program on a sound philosophical and educational basis lies with the leaders of our program. We must be aware of the conflict in philosophy and build our program on sound educational values, rather than permit the influence of professional sports to guide our thinking.

- **It is natural that many highly skilled athletes from our program will go to the professional ranks. However, we must not be organized so that our athletes will be encouraged to enter professional sports as a natural end to our athletic program, regardless of their chosen life work.**
- **We must be more energetic in promoting the spirit and the practices which are so important to the leadership and citizenship of our nation. In this regard, we fear professional sports are seriously affecting the total amateur sports climate to the detriment of development of the ideals necessary to a strong and unified purpose.**
- **We cannot compete—nor should we—with professional sports in our appeal for gate receipts and publicity. We fear that intercollegiate athletics are in danger of being driven even farther into a position where our programs will become a commercial and promotional adjunct separate from other areas of the educational program.**

Perhaps it is naive to expect to change the commonly accepted definitions of success, which are all too often "winning" and "commercial success." Naive or not, certainly it is reasonable to state that winning and commercial success must be relegated to a secondary role in the pattern of aims for the sincere college which wishes to present a well-rounded, balanced program of studies both in the classroom and on the playing field. The primary aim, and thus the major emphasis, must again be on ensuring that results are achieved in the instilling of character, moral and ethical habits and ways of thinking, team spirit, individual and team courage, and the building of total fitness which will transfer into after-college living as a force in building citizenship and leadership with the courage of strong convictions.

Surely these considerations overshadow such shallow aims as all-victorious seasons, even larger and more expensive athletic programs, huge stadiums and field houses which force more emphasis in order to pay for them, and the other aspects of an outgrown and out-of-balance program not in keeping with the other functions of the institution. We fail in our obligations as educators and as leaders of young people if we fail to recognize this.

In order to achieve this balanced, healthy status, the NAIA has committed itself to the promotion of these guides:

1. Athletics must be a normal part of the total educational program of the institution and subject to the same educational standards. Its primary aim must be the education of participants and not the building of championships.

2. Institutions should participate with others of like size and educational philosophy of athletics.

3. Coaches should be selected with emphasis upon their moral character and not primarily upon their ability to build winning teams.

4. A well-developed set of aims and objectives must be developed within the institution for guidance of the athletic program which is consistent with the aims of the institution.

5. Institutions should determine a broad, sound educational program of athletics and the selection and maintenance of sports should not be determined by gate receipts alone. Athletics should be a part of the regular budget of the institution.

6. Institutions should make their programs as broad as possible in order to serve the greatest number, rather than limiting the program to the benefit of a few already skilled athletes.

7. Intercollegiate athletics should be coordinated with an active intramural program and, if within the aims of the institution, a sound physical educational program.

8. The program must have the full support of the administration, of the college and the regular curriculum committee who are responsible for determining and guiding policies and judging results.

9. Scheduling of games must be well controlled.

10. Publicity must not be the primary goal of the program, but worthwhile public relations is a natural and worthy outcome of a sound athletic program.

11. A careful study must be made of the level of subsidy to athletes to insure:
   a. That it is consistent with the total educational program of the institution and assures the aims of that program.
   b. That it serves the purpose of containing the athletic program within the educational family of the institution and gives normal aid to the individual consistent with that of other areas of the educational program.
   c. That all subsidies or aid must be administered through the regular channels determined by the institution to administer all phases of the education program.
   d. That extreme care be taken to avoid the acceptance of financial aid from special groups which by reason of their subsidy attempt to exert undue influence upon any phase of the administration of the intercollegiate sports program.

12. While it is natural that skilled athletes will enter professional athletics, care should be taken to insure that the intercollegiate program does not permit this to be their major aim.

It appears to us that these are the areas which must be considered in best serving the aims of a return to programs which hold not only athletic and competitive values but also sound educational values.

INTERCOLLEGIATE ATHLETICS FROM THE NCAA VIEWPOINT

G. L. HERMANCE
Rice University

Records of the historical events of colleges and universities in the United States are filled with problems which arose when college students, particularly men, engaged in various forms of so-called diversions; entertainment, amusement, or recreation. These student activities created situations which had to be taken into account when trying to bring about some semblance of cooperation and harmony between the administration, faculty, and the students attending the colleges. Many of the diversion interests of students of the past have met with reasonably successful solutions, but others are unsolved, and the changing times are creating many new ones.

Students of the early college era were fundamentally the same as students of today.

Both have the same needs and desires in respect to physical well-being and the urge to express themselves through muscular activities involving speed, strength, endurance, coordination, and skill of bodily movement. Both have the same needs and desires in respect to mental attainment by achieving success and probing for usable knowledge and understanding. Both have the same need for social competency and satisfaction with self and with one's associates, and for moral and ethical behavior which enable one to be respected and accepted by one's peers.

The long-established needs of normal humans for vigorous physical activity, which were for so many generations satisfied by the requirements of the physical struggle for livelihood, can almost certainly best be satisfied through the fundamental physical movements found in games and sports. Throughout the years college students have found the answer to their various needs in the form of participation in games and sports.

The outcome of participation in sports without proper direction and suitable control can be disastrous, just as the disasters would occur if there was no direction and control in the field of literature, art, science, and engineering.

The questionable practices which developed in the college sports programs during the latter part of the nineteenth century resulted in 13 colleges and universities sending representatives to a meeting called by Chancellor MacCracken of New York University in 1905 to study sports participation practices. This first meeting was directed specifically at control of the practices in football in an attempt to make the game more suitable and safe for student participation. Out of this meeting emerged the organization we now know as the National Collegiate Athletic Association and the philosophy which has enabled intercollegiate sports to continue as a part of the total educational curriculum in the American college and university.

From 1905 to 1963 the membership of the NCAA has risen from 13 colleges to 542 colleges and universities: this shows steady continuous growth over 58 years. There are a number of reasons for colleges and universities seeking and maintaining membership in the NCAA over the years. At times issues arise which seriously divide the membership. Following careful study and evaluation of factors involved, solutions are democratically negotiated and the basic philosophy, which is the bulwark of the NCAA, emerges more clearly understood and accepted as a basis of procedure for the conduct of intercollegiate athletic programs as a part of the educational curriculum.

The basis for so great an acceptance of the NCAA can be attributed to the nature of the Association itself. It is on the following points that colleges and universities seem to base their confidence.

Basic Philosophy of the NCAA

At the first annual convention in 1907, Palmer Pierce, of the United States Military Academy, made the following statement:

> The purpose of this Association is, as set forth in its Constitution, the regulation and supervision of college athletics throughout the United States, in order that the athletic activities in the colleges and universities may be maintained on an ethical plane in keeping with the dignity and the high purpose of education. All institutions enrolled as members agree to take control of student athletic sport, so far as may be necessary, to maintain in them a high standard of personal honor, eligibility, and fair play, and to remedy whatever abuses may exist.

The above concept of the purpose of the NCAA has effectively permeated the study, discussion, and action of representatives from the colleges and universities throughout the years. The annual reports of the vice-presidents of the eight NCAA Districts, the various committee studies and reports, and the round-table discussions at which each representative may express his views on current topics and problems confronting the membership, attest to strict adherance to the stated purposes.

Organization and Administration of the NCAA

The NCAA is merely a plan for grouping together for formative action on common problems confronting colleges and universities and for avoiding the break which could occur between the academic endeavors of a student and his athletic participation. These two are compatible only as long as both are kept in true perspective in the education of youth.

The organization of the NCAA entitles each member institution to one voting delegate or representative to the annual national convention of the association. The representatives are selected and appointed by their respective colleges. In most instances they are familiar with the organization of the athletic programs of the institution and are in agreement with the athletic philosophy subscribed to by the administration and faculty. The representative is a prominent faculty member from any one of the academic fields and he is generally committed to the idea that sports participation has a respected place in the educational experiences of college students. Many of these men have represented their institutions over a long period of time and this has produced a stabilizing effect and mature and sound leadership.

Requirements for Membership in the NCAA

The requirements for membership in the NCAA specify that colleges and universities must meet certain standards and agree to conduct their athletic programs in keeping with the policies adopted by the association. Notable among these requirements are the basic principles pertaining to:

- Institutional control and responsibility
- Sound academic standards (This usually means that they are accredited by the recognized academic accrediting agency of the region)
- Amateurism of student participants
- Limitation and control of financial aid to athletes
- Controlled recruiting practices
- Eligibility based on maintaining satisfactory progress toward graduation
- Adherance to ethical conduct.

There are other principles to which a college or university must subscribe before being accepted for membership, but the above will suffice to show the concern members have to assure that the intercollegiate athletic programs will continue to be carried on successfully within the framework of established practices.

Legislative Action Taken By the NCAA to Govern and Promote Intercollegiate Athletics

The items taken before the Association over the years have been varied, but none the less significant. Their adoption, modification, or rejection has charted the course of intercollegiate athletics as we know them today. These items are subjected to committee study and to round-table discussion so that representatives to the annual business meeting are well informed about the arguments for and against the proposed legislation before any action is taken.

The breadth of items considered is illustrated in the partial list that follows:

Length of the training period, the practice session, and the playing season
The "Sanity Code"
Spring training limitations

Limitation on number of games per season
Conditions under which NCAA College teams may participate in bowl games
"Red shirting" and maintaining satisfactory progress toward an academic degree
Establishing procedure for enforcement of infractions by member schools
Limitation on recruiting practices, financial aid, and "try-outs"
Encroachment of professional recruitment into college ranks
Faculty status and tenure for college coaches
Limitations and controls on alumni funds and recruiting practices
Gambling practices and their effects
Television controls
Responsibility and contributions to youth fitness. (Use of existing physical education programs vs. "special programs")
Establishment of college championship tournaments
National "Letter of Intent"
College entrance requirements for eligibility for athletic participation
Regulations for Olympic and International sports participation and the drive for a more representative sports federation
Foreign student eligibility
Adoption of playing rules, approving championship performances or records, publication and distribution of rule books.

The topics listed above have affected all college intercollegiate programs to some degree. Many of these topics will appear again as a threat and will have to be reevaluated and acted on in the light of the changing conditions of modern times.

Recent Items of Interest to NCAA Members

INCREASED COLLEGE ENROLLMENT AND HIGHER ENTRANCE REQUIREMENTS

There are indications that by 1970 college enrollment will be up almost 50 percent over the figure for 1960. With increased enrollment will come a more selective plan of admission. A number of member schools already have highly selective admission standards and a number of conferences have plans or are studying proposals for increasing entrance requirements. In the past several years the NCAA has conducted round-table discussions on admission requirements and has appropriated funds for a thorough study of this matter as it relates to the national scene.

Increased college enrollment should mean that a greater number of students will have to be provided with the opportunity for sports participation. Two years ago the NCAA authorized its Committee on Youth Fitness to follow up on a study conducted in 1956-57 on facilities, programs, and participation data of member colleges. The comparison of the data obtained in 1956-57 with the data for 1961-62 was presented to the convention delegation at the January 8, 1964 NCAA business session. Although the data showed an increase or improvement in all areas, it did not reflect the percentage improvement that should have occurred. The data clearly indicates that our college physical education, intramural, and intercollegiate programs are not expanding rapidly enough to accommodate the increasing college enrollments.

NATIONAL LETTER OF INTENT

Recruiting of college athletes has been troublesome from the beginning of intercollegiate athletics. Many undesirable situations have developd and have been legislated against, but new approaches to recruiting practices seem to occur regularly.

Those who are advocating the use of the so-called "Letter of Intent" do not believe that it is perfect or that it will solve all the recruiting problems, but do believe that it will help alleviate some of the most objectionable practices now in existance in recruiting athletes.

Several athletic conferences currently employ the "Letter of Intent" and inter-conference agreements exist between schools of several conferences. The adoption of the "Letter of Intent" would not mean that a school would have to use it in the recruiting of their student athletes, but its adoption would probably mean that all member institutions would have to enforce the nonparticipation clause regarding students who transfer to their college after previously signing the "Letter of Intent" with another member school.

As is the case with the adoption of most regulations, some injustices will occur, but approval or rejection should be determined on the basis of what is best for the student, for education, and for intercollegiate athletics.

TELEVISION PLAN

The rapid spread of television coverage of athletic events throughout the country caused considerable concern for all but a few of those charged with the responsibility of conducting the intercollegiate athletic programs. It soon became apparent that some controls had to be administered.

No equitable plan for television coverage has been formulated to date which would protect or benefit all colleges. The NCAA members have had to settle for a control plan which only in part eliminates television competition with small college games. At the same time the plan distributes the revenue by limiting the number of times a team may appear on television each season. Because of the unpredictable future of television and its effects on college sports, the NCAA has adopted the policy of negotiating and approving plans not to exceed two years at a time. The recently negotiated television plan for the next two years calls for an income to the participating colleges of over $13 million.

NCAA Viewpoint

The contributions which intercollegiate sports offer college students are continually being reappraised and reaffirmed. This is equally true of the entire college curriculum. This is as it should be and as long as those concerned in the reappraisal are dedicated to their task and keep the welfare of the student and his place in society in focus, the policies and practices permissible in intercollegiate athletics will be reasonably sound.

There will always be difficult problems or situations, but the fact that the NCAA membership represents small, medium, and large size institutions; private, denominational, state, and federal colleges; and universities and academies serves as a check and balance system. The varied membership tends to eliminate extremes and to bring about a moderation with which the majority are able to abide. The viewpoint of the NCAA is the viewpoint of the majority of the member colleges as expressed through their representatives.

EVALUATING THE COLLEGE PHYSICAL EDUCATION PROGRAM

DELBERT OBERTEUFFER
Ohio State University

There is nothing wrong with college physical education programs today that some innovation, experimentation, and the realization that we are in charge of programs in higher education will not cure. Perhaps to preserve our status at the college level we may have to destroy a few sacred cows but that might be a good thing for physical education everywhere. In general, programs prosper where staffs remain alert and are seriously reexamining programs in order to keep them in step with the whole advancing pattern of higher education.

We get in trouble where we cannot prove our academic character is compatible with the aims and programs of our respective colleges. When we cannot support physical education as a learning process in a worthwhile area of this culture, then we are vulnerable not only to criticism but possibly to destruction.

But our contemporary problems can best be seen as a part of a larger context. Very obviously the scramble for the educational dollar is of an intensity not seen since the Great Depression. Gone are those nice relaxed days of twenty or thirty years ago when the enrollments were comfortable, the deans were unharassed by pressure groups, the physical education programs was conveniently tolerated as a pretty good affair making a nice contribution to the lives of the unhurried students as they eased their way through the gentle requirements. But no longer! Blame it on Sputnik, if you want to. Blame it on Rickover or John Dewey or Professor Bestor. I don't care, at the moment, upon whom you blame it, but times, and things, have changed. Colleges are flooded with students. Where once we, in physical education, dealt with hundreds of people, now we must build a program for thousands. At Ohio State University, we will deal with 9,000 men and women within the foreseeable future. The University of Illinois right now enrolls 10,000 in its basic instruction courses.

Today a savage battle is being fought over the educational dollar. Space is at a premium. On some campuses intramural warfare is going on as departments struggle not only for dollars but, in some instances, for their very existence. In some places the war between the humanities and the sciences is more spectacular than VE Day—although perhaps with not as many casualties. It is fascinating to watch the troops of the new scientific technologies storm the bastions of the well-entrenched classicists and humanists—who, clever people as they are, have been able to meet the onslaught of "vocationalism" or "sciencism" with well-fortified positions behind 30 or 45 hours of required "general education"!

And we are caught up in the struggle. I suppose I have been on fifty campuses in the last three years and wherever I go we, in physical education, have the same problems. In many places we are in danger of losing our requirement, or our play fields, or our academic grading scheme, or our faculty rank or something! There is trouble abounding; but it is gratifying to realize that we are doing pretty well, in the main, in the struggle for survival as our peers try to evolve a new pattern for higher education for the age in which we live.

How do we meet these local crises? How do we preserve the integrity of physical education on a college campus? Surely there is no general formula or prescription to be used everywhere. Each of our situations is unique and thus an evaluation with recommendations can only be very general indeed.

In my judgment the best way to prepare not only for our defense and survival but also for enriched usefulness on our respective campuses is to find out where we are vulnerable and clean up the situation; find out where we can make a more appropriate contribution to the education of the college man (and woman) and then do it, all the while taking an active interest ourselves as faculty members in the life and problems of our institutions.

Let's see if we can suggest some of those spots of vulnerability and some of the places where we can make additional worthwhile contributions. Here are five.

1. We should examine our instructional programs and ruthlessly throw out any activity which is more fitting for a junior high school boy than a college man. Out would go volleyball, tumbling, softball, trampolining, boxing, and half a dozen others and great would be the wailing and gnashing of teeth from the staff devotees thereof! But when we teach activities at the college level the lads have already had in junior high school and have had every year since, any intelligent member of a college faculty believes we should have our heads examined! When you are taught Boyle's Law in physics once you are supposed to know it and the best you can get in college on it is a brief review in your freshman year. From then on it's college level physics. *Black Beauty* is not taught much beyond the fourth grade but I've seen college men doing the forward roll—which to some smart young scholar in chemistry on an NSF scholarship must be a fascinating activity indeed! We simply *have* to get rid of outworn, repetitive, high school stuff in college programs or we are going to bore our student population to distraction. We are vulnerable on this point of repetition and we might as well face it and clean out the college program of all such non-college activities.

2. We take too long to do what we are supposed to do. Now, if you want to teach volleyball at the college level, go ahead and teach it, but give it about four weeks, combine it with something else, and get about five activities into the semester where now we have only one. We waste too much time. Handball can be learned adequately for further on-your-own participation in two months, canoeing in about two weeks. We are not making champions in basic physical education. We are educating students in skills and knowledge and understandings of the fascinating world of motor activity and we have no time to spend idly refereeing a class tournament or chatting amiably with a friend while the class practices what we taught them a month ago.

If we have four semesters to use in a two-year program, the people should come out of it with some competence in twelve or sixteen activities—not four or six—and *nothing* should have been taught to them for which they were adequately prepared in high school.

3. And that quite naturally leads on to the use of proficiency tests. Anything wrong with these? Why are they not in more general use? They are standard equipment in English programs, many of the sciences, and some languages. In our field George Meylan used one at Columbia College before World War I. Harry Scott put one in at Oregon in 1921. What has become of them? Surely they are not too difficult to devise. We are toying with one at Ohio State University for our 5,000 men and if we do not get it in shape, we are going to be in some trouble. There simply has to be some usage made of devices whereby we can section our college men in terms of need or ability rather than first come, first served. It is hard to convince our peers on the academic boards that all entering college students are the same as far as their physical education is concerned and that they all are to be treated alike when they come to us.

4. But what new activities should be included in the college program? It is not altogether a question of *new* activities. Some of our old ones should be offered for

the first time at an advanced level. Swimming, for example. How can we justify a college course for beginning swimming? They can't in algebra or English composition. They have them, of course. Remedial mathematics is a rather common course—but not for college credit. Couldn't we offer remedial courses in swimming, basketball (if we must), tennis, and such, and then for credit offer only the advanced sections of these?

Innovations, new sections, new format depend, of course, upon how far we are advanced to date on our own campus. Certainly skiing, sailing, navigation, conservation, corecreational activities—anything done by these people now and in adult life which presents itself as a respectable and reasonably vigorous and useful activity—ought to be taught, or taught about. Furthermore we need sections or groups discussing problems inherent in our field, gaining understanding of what physical education, including its spectacular offspring, competitive athletics, is all about.

But there goes a sacred cow! Imagine a physical education class not out there getting a workout! How can you teach about skiing or navigation without snow or water. Well, the ski schools have been doing the former for years and the Power Squadron has had enormous success with the latter. They meet the needs of the people.

5. And then there is the matter of the intellectual content of our field. Some of us have been hammering at this for years. Read Robert L. Blackenbury's article in our own jointly sponsored magazine *Quest*. He insists that to survive we must find and illuminate our intellectual elements. Our literature is filled with this sort of admonition or entreaty. In an American Academy of Physical Education lecture in 1958 the splendid educational philosopher H. Gordon Hullfish laid it on the line this way.

> No activity of a school is warranted that does not have educative consequences for those to whom it is directed, or to state it differently, in which the intellectual component is not central. This is as true in a science classroom as it is on the playing field, when either involves meaningless, repetitive acts, though its absence in the former may not be equally obvious. Classroom teachers may "call the signals" as readily as playing field teachers. They are then equally guilty of the exploitation of human material, of degrading the educative process. The fact is, of course—and this is the point of my argument throughout—that your field should either contribute to the good life we aspire to have or have no place in the education of free man. But this conclusion applies to all fields of knowledge. All that we teach should liberate the individual from binding custom and uncriticized habit and move him into the larger life of shared insight and understanding.

What does this mean? How do we implement this? You begin by smashing up a few more sacred cows. You begin by realizing that sweat need not be the common denominator of all physical education classes. We can organize experiences in discussion, exploration, and self-evaluation. We can teach through empathy and the vicarious experience. We can deal with problems of consumer need, ethics, and contemporary organization. We can deal with an appreciation of sports not ordinarily in the program. We can help our students intellectualize the need for activity, introduce them to exercise physiology, give them some basic kinesthetics, point out the "why" of physical education as a basic element in the good life. There are a hundred ways we can reveal the intellectual ingredient in the physical education experience. We have just scratched the surface and if we don't scratch deeper in the next ten years we will be in real trouble.

At the college level particularly, it is absolutely necessary that we illuminate the intellectual factor in physical education. It is important that we strengthen our efforts through any and every channel to develop in our students an understanding of physical education and its contribution to the education and development of man. Here is a tremendously significant problem and opportunity.

It has been said that we lie on the periphery of today's educational planning. But, worse than that, we enjoy the sufferance of many in education for the wrong reasons. Read Conant and you find he has not the slightest conception of the educative potential inherent in the physical education experience. Neither does Martin Mayer, or Fred Hechinger, or Admiral Rickover. Not a critic of education in recent years has given us house room beyond our alleged contribution to the illusory and ephemeral "physical fitness." We are clearly, in the minds of those critics, and in the minds of countless deans, presidents, and professors, custodians of the body which is supposed to house a sound mind. We are thought of as highly paid exercise boys who are brought to the campus to teach games, produce sweat, and keep the campus brains among students and faculty in trim to handle the truly important matters of education.

What utter, complete, abysmal, and arrogant nonsense! Made even worse by some of us—some of our own—who boot-lick administration by renouncing their birthright as educators and who seem to agree to the implication that we are merely Vic Tanneys or Bonnie Pruddens with advanced degrees! No wonder physical education is in trouble on some campuses! We ought to be—and we should remain in trouble until we can pick ourselves up by the nape of the neck and shake ourselves until our teeth rattle or until we understand what physical *education* is and what value it has inherently within it for the education of youth. If we would learn to talk in terms of self-discovery, status achievement, prevention of delinquency, formation of ethical values, ego-involvement, and other concepts as fluently as we now talk of isometrics, Kraus-Weber, and dynamometers we would be better off.

Why can't we? I know why we can't. It is because too many of us do not see or believe in these kinds of contributions from our program and are more comfortable measuring strength and half-mile runs. And thus we short-change a field which, based as it is on motor activity—exercise, if you will—is, like the *Compleat Angler*, within striking distance of being the compleat education. Rousseau saw this, so did Basedow, Bode, and Williams and Nash and Hetherington. But I am perfectly convinced from personal observation and from some of the stuff I read in our journals that the hard-nosed drill master who sees, when he looks, not a student, but a body; and who realizes that these bodies are his to insult, abuse, strengthen, and toughen in any way he sees fit is enjoying tremendously this anti-intellectual body-building kick we are now on. I am convinced that there are high school and college teachers today who do not know the difference between physical training and physical education and who are, perhaps, afraid to learn.

I am not suggesting that we alter college physical education just to please our critics. We will not get anywhere with that kind of boot-licking either. I am suggesting that there is a lot more to the physical education experience than many of us have discovered. Our area of exploration is man—man himself—and we, among a few others in the life sciences, are strategically located in the van of those whose job it is to educate man *about man.*

Now the traditional academician has always been leery of this. He has wanted to educate man about his world, his things, his environment; but he has had a feeling that to turn the spotlight of investigation on man himself had better be left only to psychiatrists, medical people, and perhaps, in recent years, psychologists and social anthropologists. But these are all suspect, every one of them. Suspected of being a little queer, and thus not academically respectable. Why? Because they study man himself and the academic man is afraid to study himself. He feels better studying the atom, or the caves of the Holy Land, or Beowulf. But when some geneticist comes up with something about DNA and the predictability of sex, or some one of us proposes that education in sport in relation to our culture might be a good thing, the long academic nose begins to twitch and we are promptly put in our place.

But we belong with that group that studies man. We offer man an opportunity to study himself. We deal with the deep motivations of personality, with the yearnings for status, with the bewilderments of youth as he seeks his identity, with his remorse and envy when he does not measure up to his hopes. We deal with movement in both its ontogenetic and phylogenetic importance to man and his development. We help him understand movement as conveyed through sport and dance—its relation to his personal and cultural problems. These things are every bit as important as muscular strength as productive affiliates of the physical education experience. Is there anything wrong with seeking these understandings?

I know how much fun it is to win, the score board is an important evaluative mechanism. It is nice to win in the Cotton Bowl—but the real scholar in our field is the one who can give depth to the Cotton Bowl experience and, better still, direct that experience, any experience from the field of motor activity, so that it becomes productively meaningful and constructive to human life.

I have the distinct impression that if we do not start to take ourselves seriously in these respects no one else will and the curtain will come down on college physical education until a new generation of broadly-based scientists will have entered our field and brought it back to life. To deal with student welfare is not enough—to contribute to his understanding of himself by educating him through motor activity must be our compelling direction. We have a contribution to make to the college education of men and women and we must bend every effort to find it. When and if we do, we will not need to worry about our standing in the educational family of worthwhile disciplines. Our position, the position of physical education, will be secure.

LIGHT OBSERVATIONS OF A RANK AMATEUR

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It is my function on this program to raise some questions with you from the vantage point of an outsider—concerning some of the confusion, misunderstanding, lack of purpose, and conflicting voices in physical education and intercollegiate athletics. By provoking you, I may stimulate some excited and heated discussion which in turn may motivate rationality and shed some light.

I have entitled my remarks "Light Observations of a Rank Amateur." I picked these words very carefully. The word "rank" has two meanings which you know. One has to do with putrid, spoiled, absolutely offensive. The other meaning of the word "rank" has to do with power or hierarchy. Since I am to be the prototype of a president, I will assume that second definition of the word, too. I would qualify as both. It will frighten you a little to see how ignorant a man who is president of a university can be about your field, and you will say, "This is our problem: beware of ignorant men in power."

Now let's take the word "amateur." I recognize that this is an emotionally laden word for your profession. The sports world is torn asunder right now over the various definitions of this word. I am pleased to see that some writers imply that the word "amateur" is a synonym for the word "gentleman," but I suppose that the only way in which I can qualify is to assure you that none of my salary comes from any of the intercollegiate sports income. So, I guess I am an amateur. Another definition of that word would be "a babe in the woods," as far as understanding the deep theory and the philosophy of athletics and physical education is concerned.

Let me speak first of the background for some of the things I am going to say.

My idea of the purpose of a college or university experience, or a college campus, is that it is organized to develop the potential of each and every individual student. We have a real problem in our tendency to think and plan in terms of "batches" of students. Our real purpose is to find the individual and to develop his potential, and this means to develop a climate or an atmosphere in the university community and to provide a set of facilities that will be conducive to all sorts and types of growth. I am one who believes in the "whole student" approach to education. I use this "whole student" phrase with some reservation because it has become a cliché which immediately establishes me as old fashioned, but nevertheless idealistic, about the purpose of higher education. I believe that the function of the college and university is not to develop only the intellect, but also the physical, social, and spiritual resources of the postadolescent. One thing that I think psychosomatic medicine has proved to us in the modern day is that an individual is not a series of compartmentalized segments and that growth and health depend upon the mind, emotions, physical fitness, social adjustment, and spiritual competence, all for a very complex and bewildering world.

Therefore you will not have to convince me of your belief, because I also believe that playgrounds, student unions, and living centers are as important in the total process of education as laboratories and classrooms. Yet I do not know exactly how these facilities and the programs in which you are primarily interested are actually translated into fulfilling the potential of individual students.

I would like to give you my own personal testimony. I am a product of intercollegiate athletics. I had the good fortune to participate in intercollegiate football, and was a participant in physical education from my early childhood. You will understand this readily when I tell you that my father was a YMCA secretary and that I do not remember the time when I was not hanging around a gym somewhere or other. So I am a product of these experiences. Something has happened to me because of them, and I would not take anything in the world for the residue of value that they have brought me. But how and why they helped, I am not sure. I'm like the blind man in the New Testament who was given his sight by Jesus. He was called before the Sanhedrin, a group like this, and asked to testify. He said, "I don't understand what has happened to me; all I know is that I was blind; now I can see. You smart men figure it out." So I want to talk to you in terms of some personal experiences, and maybe you can make some applications.

What did I learn? I think one of the most important things that I learned was to understand and be at home in physical strain. I see many of my colleagues, friends, and professional people on or off the campus who do not know how to cope with physical strain. This is easy for me to understand because I am experienced in it. However, this is not an automatic lesson. Each time I find that I have received value from this experience, I find that some of those who were exposed to the same process do not have the same carry-over that I do, and I now realize that three of my former teammates are dead and two others are completely incapacitated physically because, although at one time they had splendid bodies, they did not know what to do with them and did not know how to learn to be at home under physical strain. The conclusion must be that there is not an automatic carry-over, but I thank the Lord that I had this beginning and this background because it has been of great usefulness to me.

Besides the advantage of physical stamina and knowing how to cope with physical stress, I had many wonderful experiences and learned a great many lessons in the field of competition. One of these is knowing the thrill of the contest—I think something comes with learning how to find a thrill in competition. We all know a good many people who shy away from competition; who will go to great lengths to keep from having to compete. But there is a thrill in desiring to win against equal odds or competition, and in the need for quick and decisive thinking under pressure. Thus, the pressures of decisiveness and quick decisions do not become morbid or terrible, or make a martyr of me, but I have found that they are something to be excited about and to enjoy.

Another of the important qualities that came to me as a result of these experiences was the ability to learn how to snap back from a defeat. When the play is over, and you've been scored on, you do not have time to be morbid. You have to pick yourself up, brush yourself off, and get ready to receive the next play. You haven't time to become sorry for yourself. I have learned that this is a terrific lesson that people should know, particularly in this very complex world in which we live.

Of course, I was greatly enhanced by the thrill and understanding of team play—the dependence upon others; the delegation of responsibility; the sacrifice that comes for the good of the team. I also learned some great lessons about the discipline of training and practice, something understood by very few people in the stands who have never had any experience with intercollegiate athletics. What does it take to make a great punter, or a great blocker, or a great basketball player, or a fine track man? Discipline, practice, and self-denial go into these accomplishments.

One of the greatest lessons is that you have to live by the rules. Out of bounds is out of bounds. Maybe you did not step out of bounds, but if the referee says that you were out you would waste too much time trying to figure out why, and who pushed you, and in protesting that you didn't mean to do it.

Another thing which comes to mind as I try to evaluate what this experience has meant to me, is that I learned that sometimes it is necessary to take chances and to make bold and venturesome play; that sometimes you have to kick on the first down or to run with the ball on the fourth down, or you have to try a play that the opponent doesn't quite expect. This is the gamble and thrill of bold, adventurous, and exciting play. From my experience came a great admiration for those who excel. Perhaps I am an inborn hero worshipper, but when I meet a champion in anything, who is the best in his field, this brings forth in me an emotional flood of appreciation.

We might as well admit that intercollegiate athletics has a carryover on every sort of play and every vacant lot touch football game, on people shooting at baskets in the back yard with a hoop on the garage door, and on other things that come from the contagious excitement and thrill of emulating the hero or the champion. I also think that this has much to do with the very best that any school can produce, and, while there are many objections and some very serious problems about the non-participants—the persons who take all their athletics as observers—I think that there is nothing bad or dangerous in their emotional symbolic identification with the people who represent their school.

Another thing that I have found—which maybe you would not put on your list—is that intercollegiate athletics present opportunities for magnanimous action. Some of the experiences which I remember best and which made indelible impressions on me, even more than some of the scores of the games in which I played, were the extraordinary evidences of sportsmanship on the part of some of my opponents.

Now all this does not lead to automatic value building. We know that the desire to win causes short cuts and cheating. We know that defeat can kill the spirit and then begin to cause rationalization and scapegoating. Being defeated does not automatically mean that you can learn to cope with it. We know that team play can rob a person of his individuality and his self-challenge. We know that training and discipline can become an end in themselves rather than a means to an end. We know that living by the rules can bring on legalistic behavior rather than a spirit of the law.

We know that hero worship can be corrupting, and that champions must be found as a result of equal opportunities for all and not be rigged or set up. We know that this magnanimity comes from sports opportunities which can also be opportunities for meanness or for dirty and unethical participation. How do we insure the good residue of benefits? I don't know—I think this is your business. Some of you will have to think it through and perhaps come up with some of the answers about how the crystalization of these benefits in the lives of the people who participate can be made more than just haphazard.

Now I want to mention some things which badly confuse me about your profession. It is not up to me or to any other college administrator to work out the answers to these questions. If you can't work out the answers and learn to be articulate about some of these things, and give direction and interpretation to what you are trying to do, I do not know who will do it for you.

The first thing I am confused about is this business of "physical fitness." I understand from some that it is a myth. I am confused when I read reports from experts in the field who, by the nature of their statements, leave me in a quandary as to the true function of these programs in our academic community. For example, my colleague on this program has stated flatly that physical fitness per se is a myth. In sharp contrast, the President's Council on Physical Fitness states in its policy guide for physical education that "physical fitness is a basic objective of physical education." I had thought that the President's Council had contributed to awakening the American public to the need for a physical education program in our schools, but my impression received a jolt when I read in the first issue of your new publication, *Quest*, the following statement by Dr. Oberteuffer:

> Perhaps the academic eyebrow is raised at sport, and its badly named family physical education, because of the internally generated confusion relative to the discerned ends of its efforts. This confusion is patently self-destructive. Right now the popular theme song is physical fitness. This is the fourth time in this century programs of physical education have been captured by this popular theme and bent to fit its illusions. A demigod comes out of the southwest with eloquent credentials in folk-lore but with knowledge of neither need nor know-how and asks us all to exercise and sweat and thus save the nation, or at least its youth, from devastation and desuetude. Bludgeoned by a Presidential plea for physical fitness, we reluctantly test and exercise, push up, pull and run-walk 600 yards, thus chasing a biological end which not only has no relation to the educative process but which has a built-in rejection factor which dooms the program to failure in our kind of society.

These are strong words and, for the ordinary layman who does not understand what Dr. Oberteuffer is trying to say, they leave, to say the least, a strange impression. Obviously, a careful reader would not take isolated statements out of context and imply that they represented the whole truth, but the average layman is likely to become confused when such conflicting statements are given emphasis.

Dr. Douglas Fessenden, writing in the March 1963 issue of the *Journal of the Association for Supervision and Curriculum Development,* reported that he received the following replies from school administrators to the question: "What do you see as the main purpose served by your program of physical education?"

> Our basic aim is to instill a sense of discipline and respect for authority.
>
> The only real justification for physical education is to build strong and capable bodies.
>
> We view our physical education program as an instrument to be employed in the development of adequate, well-adjusted personalities.

Fessenden reports that he received such a variety of answers from school administrators to this question that it was difficult to identify a common program or denominator or even to make a pattern out of it.

This nomenclature is confusing to us—physical education vs. physical training. A required course of physical training is given on our University's freshman and sophomore levels. This is a very good program. But we also have one of the roughest and most rigorous degree programs in the field of teaching teachers of physical education. It is a very competent and highly respected academic degree, and yet we call some of these advanced courses physical education just as we do physical training. It is confusing to our campus, and to others. Of course we realize, in spite of all the people who do not accept it, that physical training is not a substitute for hard academic development any more than an intercollegiate athletic program is a substitute for an intramural program, or ROTC and band drill are the same as physical training. We have some badly confused people who want to exchange these programs and I plead with you not to let anybody equate your work with anything like band or ROTC—but do not try to equate your work with something that is nothing like it, either.

I think the intercollegiate program is increasingly healthy because it is largely conducted by gentlemen who want it to be an asset to this country and to the colleges and universities who participate. We all know at least a few exceptions that have been held up to us and are beaten over our heads all the time.

Another question I would like to ask is, How do you motivate this carry-over factor? You have wonderful activity programs—how do you know, and how are you sure that they will carry over?

I would like to talk a minute about your problem of required courses. In my experience, not only in physical education but also in other parts of the curriculum, I have noticed that where a course is required, something happens to it. Something happens to the students and to their attitude when they go to that course. Something happens to the teacher of that course—he comes in and says, or at least thinks, "You didn't choose me and I didn't choose you. If you don't do what I tell you, by gum, you're going to be here next term. There's no way except to pass; there's no way to pass except to please me. Now let's get this straight." The student replies, at least in his mind, "I don't want to be in here; they forced me in here; I'm not going to like it; I'm going to resist it." This often happens to a course when it is required and I think that part of the problem is the fact that in so many places it is felt that "it's so good for everybody that we should require it." This kills the sparkle and the opportunity in it. But that's your problem, not mine.

The thing I would most like to say is that you should take yourselves seriously. Apart from some bad examples of the use of physical education courses to keep athletes eligible and the stigma that comes from that, your program is a very important and demanding, exciting, and pertinent part of the university campus. We need a great deal of research to answer certain questions, but we also must realize that the main function of this program is good teaching. I would like to testify that some of the best teaching done in higher education today is done in physical education. This is my limited experience, but in intercollegiate athletics we see the coach as almost the master teacher in so many universities, for he takes what he has and develops his group by hard work (harder work than is done by almost anybody else on the campus), and tries to make this potential into something better.

In conclusion, I would say: Take yourselves seriously and be articulate about your purposes. You do not have to be defensive about your place. Provide an example in this important work you do which will enrich the whole academic world.

history of sport

THE FORMATIVE YEARS OF SPORTS CONTROL AND THE FOUNDING OF THE AMATEUR ATHLETIC UNION OF THE UNITED STATES[1]

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The Years Preceding Athletic Control

History is replete with man's interest and participation in sport. Despite their puritanical heritage and struggling efforts to give birth to this new nation, Americans loved and engaged in games and sports from the beginning. However, as Foster Rhea Dulles said, "It was a phenomenon somewhat difficult to explain, but the first faint stirrings of popular interest [in sports] may be traced to the decade before the Civil War." And although sports writers, doctors, and devotees of sports expressed a concern for the apparent lack of health and physical vigor of the Americans as contrasted with their European cousins and advocated participation in vigorous sport to counteract the deleterious effects of the type of living prevalent in the United States at the time, much prejudice continued to prevail against sport. "Democracy is too new a comer on earth," wrote a shrewd foreign observer, Michael Chevalier, in 1833, "to have been able as yet to organize its pleasures and amusements."

Despite this lack of organization, many devotees could be found. The individual with some athletic prowess would seek an outlet for his zeal and skills and often an enthusiastic group of followers would encourage him to test his abilities against others or against some set standard.

Athletics manifested itself in many curious ways. Pedestrianism was extremely popular and included foot races of from 50 yards to 10 miles, walking races of from 1 to 500 miles, and as many types of exhibitions and hippodroming as the imagination could conceive. (Hippodroming was the practice of engaging a hippodrome for pedestrian matches, the participants receiving the admission fees.) It was the vogue for the "ped" to issue a challenge, either directly to his intended opponent, through an intermediary, or through the newspapers. Undoubtedly many such races were run for the sheer joy of pedestrianism and competition but as a rule the challenge was followed with a side bet. It was not necessary that the competitor himself put up his own stakes, although he might do so, for often he would have a sponsor who would stake him. Sporting periodicals and community newspapers constantly carried these challenges from pedestrians and other athletes. Some typical challenges of the sixties read as follows:

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[1] Bibliography may be obtained from the author.

Pedestrianism challenge:

> Poughkeepsie, February 26, 1863
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> Seeing Mickey is not satisfied with his defeat by me some two years ago, I now will make him a match to run him 5 miles, and jump 500 hurdles 3 feet high. The one that runs it the quickest, and knocks down the least to win: and I will pick up 100 stones one yard apart, with him, the one that does it in the shortest time to win; each race to be for $25 a side, and the Editor of the *Spirit* to be stakeholder. As soon as Mickey puts up a deposit as a forfeit, I will send the same amount of money, and name the place to run.
>
> Jas. B. Kensley.

A boxing challenge in 1860:

> Billy Clarke of Birmingham will fight any 104 lb. man in the United States, give or take 2 lb., for $200 or $300 a side. Money ready at William Clark's saloon, Laurens-street, near Bleecker-street, New York.

A hammer throwing challenge in 1865:

> I, . . . challenge any man in the world to throw the hammer (weight of hammer not to exceed 16 lbs.), for from $200 to $1000. Also, the common chopping-axe, the 28 or 56 lb. weight. Any gentleman desiring to make a match at either, by dropping a line to Thos. Jarmy . . . Toronto, C.W. (Canada West), or through this paper, will be promptly attended to.

Reports of skulduggery, bribery, "fixed" matches, professionalism, and even the concoction of fictitious sporting events by reporters, were frequently heard. There was no policing of the events by any organization nor was there a central clearing house to establish rules, maintain records, or resolve issues. Saving occasional protestation from the press, contestants, backers, and followers ran their events as they saw fit. Among the rare exceptions were the rowers who had better organization and honesty of effort in making their sport a more legitimate practice than other sports of the times. One of the most active rowing associations of the middle nineteenth century was the Schuylkill Navy of Philadelphia and it was noted for the fairness of its regattas and its excellent administration. The first amateur boating organization in American waters was the Castle Garden Amateur Rowing Association, organized in 1837 with twelve or thirteen clubs. It continued for many years in maintaining integrity in rowing.

Other sports of the times included cricket, baseball, swimming, gymnastics, cock-fighting, horse-racing, dog fighting, billiards, wickets, pistol and rifle shooting, rackets, football, curling, roller and ice skating, hunting, fishing, as well as numerous unique, if peculiar, activities such as fire department contests of various sorts, telegraph pole climbing, and jumping and dancing matches.

In sports other than rowing, a few scattered attempts were made to regulate the conduct of participants. Writing of some early efforts, James E. Sullivan remarked,

> The first authentic report that can be found is one of an amateur athletic meeting held in Hoboken, N. J., Sept. 4, 1838, and athletic games were held in the United States and Canada at intervals from that date up to the late sixties. . . . The first amateur athletic meeting held in the United States by a properly organized amateur athletic club was given by the H.M.A. [sic] Association of Paterson, N. J. on the race track of the Passaic County Agricultural Society in the Spring of 1866.

The New York Athletic Club also was organized in 1866 and soon thereafter sponsored both closed games for its members and open games. Pedestrian and snow-shoe clubs had been popular in Canada since 1840, and by 1865 the Montreal Pedestrian Club was a leading force in Canadian athletics. It was noted that in 1856 a cricket club adopted a series of resolutions disapproving the action of one of its members who took part in a match between two clubs, neither of which was his own club. Aside from these few instances, however, there was little control over sports.

The Caledonians

One of the brighter scenes in early American sports can be credited to the Scotsmen, who brought their native games to this country and engaged in them as they had in Scotland. The Caledonian societies held annual games in their communities and the first reported one occurred at Boston in 1853. The next games to gain attention were those of the New York Caledonians, who held their first annual contests in 1857. Philadelphia's society ran games in 1858 and soon societies were holding games in Canada and in several states from the Atlantic to the Pacific.

The Caledonians of New York City customarily assembled at the club house in their full Highland costume of kilt and hose representing every variety of clan. Delegations of the members of other Caledonian Clubs occasionally participated in the sports and games. When visiting in the United States, some of the celebrated athletes from Scotland would join in the games. On the morning of the annual festivities the assemblage would wait for a signal from their leader and then would march and ride to Jones' Wood, arriving in mid-morning "amid the enthusiastic cheers of all present." They marched directly to the lower part of the lawn where a space of 550 feet in circumference was roped off and after bagpiping and some dancing, the games began. Typical games included from 15 to 25 events, among which were hammer throwing, putting stones, running and standing jumps, short and long runs, walking, hurdling, hop, step and jump, novelty races, "Restling Scotch fashion," dancing, singing, and quoits. Sometimes entrance fees were charged and prizes; cash, medals, or articles of clothing were offered. Admission fees of fifty cents aided in financing the games.

Although the games were primarily for the members, spectators were admitted and estimates of attendance as high as 30,000 were reported. Generally from 6 to 15 percent of those in attendance were contestants. In contrast to other sporting events of the times these games were well organized and the behavior of the contestants and spectators left little to be desired.

The Caledonians flourished and grew. Eventually they ran Junior Caledonian games, held North American conventions, standardized weights, distances, rules, etc. of the events and lent tone to the athletic program afforded the Scotchmen and their descendants. Eventually their money prizes led to problems of amateur status for some and resulted in some younger members breaking off from the parent club and the formation of the Scottish-American club. Along with the rowers, the Caledonians deserve much credit for the fine precedent they established and the wholesome influence they have exercised over sportsmen up to the turn of the century.

Early Attempts to Regulate and Organize Athletic[2] Competition

Exclusive of the Caledonians and the rowers, who were concerned only with their own groups, it was not until 1861 that an attempt was made to formalize and properly conduct athletic events in the United States. The Fashion Pleasure Ground Association of Long Island attempted to conduct track events in the first recorded effort to sponsor an organized meet. Sporadic efforts to organize track culminated in the holding of a 100-yard race, allegedly for the national championship, at Circleville, Ohio in 1863. Several challenge races were run for the "championship" but the title of champion was rather meaningless since many who considered themselves above average in athletic skill were prone to adopt the title. The Civil War inhibited the promotion of organized athletics and it was not until 1865 that Canada and the United States really met with any degree of success in these ventures.

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[2] A few words concerning the use of the term "Athletics." *Athletics* in Europe and nineteenth-century America referred to those events which are now identified as track and field events. Similarly the term *games* referred to track and field meets. It was not until well into the twentieth century that the AAU acknowledged that *athletics* perhaps was too ambiguous a term for general use. It may be noted, however, that the term athletics is still used in connection with the Olympics rather than track and field.

In 1866 the New York Athletic Club was organized and two years later it began a series of semiannual games. Since its inception this club has exercised a role of leadership unmatched by any other club. The form of organization, constitution and bylaws, and rules or laws for the conduct of athletic and other games served as models for many of the hundreds of athletic clubs which were to follow in its wake in the last three decades of the nineteenth century. Patterned after the Amateur Athletic Club and the London Athletic Club of England, the New York Athletic Club borrowed much of its knowledge from them and other English sports groups. Despite some mistakes it was instrumental in bringing a semblance of order out of the chaos that dominated the athletic picture of the day. The San Francisco Olympic Club, probably the oldest social and gymnasium club in continuous existence in the United States, added athletics shortly after the New York club set the pace. Colleges, although previously engaged in track and field, seemed to become more organized at about this time. During the seventies, hundreds of clubs sprang into existence all over the country and their influence seemed to grow in proportion to their numbers.

Leadership by Athletic Clubs

With the advent of the athletic clubs, it soon became apparent that organization, respectability, and control were desirable and would have to come about. Many forces had been at work—the spontaneous challenge matches; the precepts from England, Canada, and Scotland; the Caledonians; the athletic clubs; the press; the colleges; the other sports clubs; and, no doubt, other factors. Ultimately the conduct of sports in this country resulted from a combination of interacting forces and no one facet should be awarded either the entire credit or blame. Many seeds of organization had been scattered and it was inevitable that soon a crop would be harvested. In 1872, England formed an association of athletic clubs and it seemed axiomatic that whatever England did, athletically speaking, America would soon follow.

The evils associated with sports were not, however, banished simultaneously with the advent of the athletic clubs. Betting, running under assumed names, proselyting of athletes, excessive values of prizes, the concept of amateurism, membership in clubs and competing with or against nonmembers, or competing for more than one club, were among the persistant problems.

The *Spirit of the Times*, a leading sporting newspaper, was the self-appointed guardian of athletics and constantly suggested means for improving the status of sports. It proposed that one athletic club should be the recognized authority in athletic matters as was the custom in England. Little effort was made to adapt English regulations and procedures to American needs and all suggestions were, more or less, mere copies of English ways of conducting athletics.

Early Efforts at Athletic Control

In July, 1873 there occurred the first effort to organize athletics beyond the club limits. Men from Brooklyn and New York gymnasiums organized the National

Amateur Gymnastic and Athletic Tournament Association for the advancement of athletic and gymnastic exercises. A tournament was conducted and proclaimed an extraordinary success but, despite this, the organization ceased to exist after this meeting.

Sentiments were expressed in Canada and the United States in favor of a sports governing body to be called the North American Amateur Athletic Association. It was initiated by a Canadian in 1873 and while much interest was evinced by athletic clubs and interested citizens of both countries, the group was never organized, even after the New York Athletic Club attempted to call a convention for this purpose.

Ed Plummer, the athletic editor of the *Sportsman,* a former professional walker and swimmer in England and a promoter of walking tournaments, fanned the flame for unification of athletics by calling for a convention of athletic clubs in 1878. Although thirteen metropolitan New York clubs attended, it was significant that the New York Athletic Club did not see fit to participate. At a subsequent meeting on March 25, 1878, the American Association of Amateur Athletes was formally founded. A review of the activities of this association many years later indicated that it had exhibited little vitality, took no steps to assume authority or enforce its rules, and quietly died a few months after its birth.

The Columbia College Boat Club in 1879 planned an athletic meeting intended for amateurs only. Guides, rules, and definitions were set up for the conduct of the meet and it was later revealed the standards had really been established in anticipation of the formation of a sports governing group entitled the National Athletic Association. Criticism was offered because this group was composed mainly of nonathletic clubs, exclusive in nature, which sought to superimpose their regulations on the athletic clubs. As a result of this criticism and internal strife this group did not gain acceptance among athletic clubs.

Athletic Control Established

The athletic clubs, not wishing to become involved with, and possibly dominated by boat, polo, lacrosse, or other sporting clubs, passed a resolution at one meeting in which they found themselves to be a majority, to the effect that an organization of nothing but athletic clubs should be formed. This led immediately to the founding of the National Association of Amateur Athletes of America on April 22, 1879. Seven clubs of the New York, New Jersey, and Boston area became charter members. The constitution was modeled after that of the National Association of Amateur Oarsmen and ended a year or so of much exchange of letter writing, newspapers comments, and meetings by many individuals and clubs.

The new organization sprung into action immediately and the years immediately following its founding saw many athletic events being conducted, a rapid growth in the number of clubs and numbers of competing athletes, and, as might be expected, attendant problems of amateurism-professionalism, proper sponsorship of meetings, jurisdictional matters, etc. In 1881 the association incorporated and it was also in this year that provincialism gave way slightly when a person from outside the vicinity of New York was elected to the executive committee.

By 1882 there was a decline in interest in track, the number of clubs had been reduced considerably, and the strength of the NAAA declined sharply. Many criticisms were directed at the NAAA, not the least of which was that despite the affiliation of the Intercollegiate Athletic Association, the parent organization recognized all seventeen members of the IAA as only one club, which resulted in each club having but one seventeenth of one vote. Why the colleges accepted this ignominious role in athletics when the custom in lacrosse, cricket, rowing, and lawn tennis associations was to recognize each college as a separate club, is difficult to assess. In 1883, the

National Association began publishing *The Amateur Athlete* which appeared weekly for seventeen issues but due to non-support from the athletes became a bicycling and tennis magazine. By 1884 the Canadians had formed their own governing body and withdrew from the NAAA. It was in this same year that the Pacific Coast Amateur Athletic Association was organized but no effort was made to affiliate the two organizations. Because they were thoroughly disgusted with the management of athletic affairs and those in control of the NAAA, the New York Athletic Club decided to withdraw its membership. The resignation of this powerful club proved to be a telling blow and soon other clubs followed with their resignations.

The Manhattan Athletic Club had been organized in 1877 and rapidly achieved athletic and financial strength unmatched by any club, with the possible exception of the NYAC. An intense rivalry existed between these two clubs and continued for many years. Bitterness was intensified because the Manhattan A.C. virtually became the National Association of Amateur Athletes of America and several times legislated to the disadvantage of the NYAC.

The Amateur Athletic Union of the United States Emerges

Dissatisfaction with athletic affairs and mismanagement by the National Association was openly and continuously expressed during 1887. Besides the NYAC, the Athletic Club of the Schuylkill Navy of Philadelphia was a severe critic of the governing body. Unwilling to suppress its feelings or to be content with continuing the unpleasant status, the latter club decided that counteraction of a constructive nature was imperative. Accordingly it wrote a letter on September 12, 1887 to the NYAC, suggesting the formation of a new amateur athletic association. In response, on September 14 the NYAC circulated a letter to fifty clubs, including colleges, which stated, among other things, that a meeting would be held at the NYAC on October 1, and that;

> The general purpose is to form an organization broader in its scope, more liberal to clubs at a distance from this city, more far-reaching in its purposes, and more general in its encouragement of amateur athletics than the present association.

The *Spirit of the Times* on October 8, 1887 reported that the meeting was held as scheduled and in attendance were representatives from nine athletic clubs from New York, New Jersey, Detroit (by proxy), Washington, D. C., Delaware, Indianapolis, and Philadelphia, and letters or telegrams of support from five other clubs. Neither the Manhattan Athletic Club or the collegiate clubs attended. The delegates decided that an organization should be formed and other clubs invited to join. Officers were elected for the temporary association and a constitution committee was appointed which became active at once. On January 21, 1888, representatives from fourteen clubs responded to the roll call, and the Amateur Athletic Union of the United States was formally organized.

Eastern United States now found itself with two national sports controlling bodies. Inevitably a feud arose between the two organizations and the contention for dominance resulted in intense rivalry and bidding for support from the clubs and athletes. Eventually the National Association of Amateur Athletes of America lost more and more members, strength, and prestige and decided it should seek amalgamation with the AAU. It was not long before all colleges and clubs withdrew their support of the NAAA and the Manhattan Athletic Club became the only remaining member of standing. Thus, only a club remained and the AAU was not interested in attempting reconciliation since it contended there was no national body left to negotiate with.

Because they protested the administration of both groups and in order to protect their own interests, a number of Midwestern clubs organized the Western Association of Amateur Athletes at St. Louis on October 14, 1888. Although the AAU recognized the existence of this group and the Pacific Coast Amateur Athletic Association, it took no action for or against either of them.

The AAU sprang into action immediately. It sponsored meets, tried to put the athletic house of Eastern United States in order, legislated and adjucated athletic affairs constantly. Eventually it became strong enough to command sole control of athletics and proceeded to do so in arbitrary fashion, at the displeasure of many, but to the satisfaction of the majority.

Although the feud between the two sports governing bodies was intense and bitter, there were men on both sides who could see little sense to the dispute and initiated efforts to resolve the conflict. After some exchanges of letters and personal meetings between men of both organizations, a committee report was prepared and accepted which resulted in the dissolution of the NAAA on August 1, 1889. Although it would be exaggerating to say that all would be harmony in matters athletic henceforth, it could be said that the way was well paved for the AAU to become the sole governing body over sports, with the possible exception of those participated in by educational institutions.

Conclusion

This then is the story of the antecedents and the founding of the Amateur Athletic Union of the United States. It was born out of a need for unification, standardization, communication, liaison, organization, and administration of affairs athletic. Its birth was a tremendous struggle, its conflicts many, and its problems never ending. It has made mistakes and enemies and has caused injustices, but, as is true in all countries, the United States demanded some central body as a parent organization for all of the thousands of athletes and hundreds of clubs who wished to compete with a semblance of order and integrity. The AAU has attempted to provide this leadership. How well it has functioned can be measured in its subsequent history, its years of existence, its growth, its power, the men it has influenced, and its present status.

BACKGROUND OF THE CONFLICT BETWEEN THE NCAA AND THE AAU[1]

PAUL STAGG
University of the Pacific

In order to understand the problem fully, it is necessary to go back into the sequence of development of sports organizations in this country. Athletic activities have always been carried on. However most of the sports as we know them had their beginning on the East Coast in the last half of the nineteenth century, particularly since the Civil War. Although the sports of rowing, baseball, football, track and field, and others were practiced in the early days on the various college campuses, generally athletic activity was considered something to be tolerated, rather than fostered by educational institutions. Activities were largely run by students with the help of some alumni. Generally there was little organization until near the end of the century.

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[1] Bibliography may be obtained from the author.

Along with the gradual development of athletic programs on the college campuses, there was a much faster development of a sports program outside the college field. Throughout the East, especially around population centers, athletic clubs developed, particularly in the New York City area.

The first organization for the control of amateur athletics was formed in 1879. It was called the National Association of Amateur Athletes of America. The strength of this organization was in the New York area, where it conducted various athletic championships for about ten years before it was forced out of existence by the AAU.

The Amateur Athletic Union, (AAU) was formed in 1888. The reason given for its formation was "the general dissatisfaction over the way athletic affairs were being handled by the National Association of Amateur Athletes of America." Rather ironically, the quoted passage is very similar to the charge leveled at the AAU by the National Collegiate Athletic Association (NCAA) a few years later.

The AAU, at first had a club membership, but later changed to association membership, each club or similar organization being entitled to representation regardless of size or activity. An effort was made to get all organizations sponsoring athletics to join. Pressure was brought to bear on the various organizations to have all competition and exhibitions of sporting events sanctioned by the AAU by disqualifying any participant in an unsanctioned meet from participating in any athletic sporting event sanctioned by the Union. Since the AAU conducted meets and tournaments throughout the country which, in the early days, were not equalled by any other organization, the pressure could be great. The AAU had a system of registration whereby persons competing in sports over which it claimed jurisdiction would have to register with it, certifying to their amateur standing. At first it claimed jurisdiction over all sports; however soon many of the team games, such as football, were eliminated. Although within the United States the AAU claims jurisdiction over relatively few sports participated in by the colleges, they do claim full jurisdiction over all international competitions.

The NCAA came into being in 1906 as a result of problems in connection with football, particularly the football rules. There were 38 members at first, but it has grown in membership until now over 500 colleges and universities are members. Membership is institutional. From the beginning the NCAA was constituted as an advisory body with no executive function except through its committees. This principle was followed until 1947, when the enforcement program was inaugurated. Nevertheless, through the various committees and through resolutions at conventions, forceful actions have been taken. The NCAA expanded its influence through its championship events, which began in 1921 with a track and field championship.

Through the years there have been several areas of conflict between the educational institutions and the Amateur Athletic Union:

1. The AAU's rules requiring sanctioning of events and registration of participants.
2. The question of the right of the colleges to compete internationally with other educational institutions without permission of the AAU.
3. Representation in the Olympic organization.

Early Conflicts with the Colleges

In the years immediately after the formation of the AAU, the colleges had no organization to fight their battles for them. My father, Amos Alonzo Stagg, once told me that there was a good deal of unrest among the colleges in the 1890's over the rules of the AAU. He said that during that period, when he was at the University of Chicago, he took issue with the Central Association of the AAU and won certain concessions relative to educational institutions running their own affairs.

One of the best documented early conflicts between the colleges and the AAU occurred in basketball. During the early years of basketball, which was invented in 1892, the YMCA was largely responsible for its promotion, but as basketball became better known the athletic clubs under the AAU began to play the game. As a result, the YMCA and the AAU collaborated in the publication of a basketball guide which included the registration rules of the AAU. Registration required certification of all participants as to their amateur standing. Any registered team playing an unregistered team was disqualified and outlawed. Since there were not too many teams playing basketball, it was the custom of the colleges making a trip to pick up a game or two with athletic clubs. Some of these clubs were registered with the AAU and some were not. This resulted in a number of well-known institutions being in constant trouble with the AAU.

The decision to publish a collegiate basketball guide came out of a discussion at the time of the Yale-Pennsylvania basketball game at New Haven in January 1905. Ralph Morgan, the Pennsylvania manager, had received a letter from James E. Sullivan, secretary of the AAU saying that if Pennsylvania played Yale, which was considered an outlaw team because it had played the Crescent Athletic Club, Pennsylvania would be disqualified and outlawed. It was suggested at that time that the colleges form a committee of their own to make the rules of basketball and leave the matter of eligibility up to the individual college faculty. This committee was formed in 1905 and came under the NCAA in 1908.

NCAA Comes into the Picture—1920-1940

Immediately after World War I, there was a great revival of interest in athletics. The NCAA began to expand its functions and take an interest in activities that previously had been left to the AAU. Most of the conflict revolved around representation in the Olympic organization, although there were three incidents outside that area worth mentioning.

Until 1921, the NCAA had never entered the field of conducting national championships. Before then nearly all the big championships were run under AAU sponsorship. When it was suggested the NCAA conduct a track and field championship, the AAU did their best to discourage it, however, the NCAA went ahead with the track and field championship and, later, other sports.

A second incident occurred in 1923, when the NCAA was asked by the Paris University Club to help secure American college students to compete in the International University Meet in Paris that year. With the permission of the University of Southern California, Charles Paddock, an outstanding sprinter, competed in the meet. After the meet Paddock was suspended by the AAU for competing in the meet without permission of the AAU and made ineligible to compete in the next Olympic Games. At that time a statement of policy was made by the NCAA as follows:

> American colleges and universities reserve the right to determine the eligibility of their students to compete in intercollegiate athletic meets in this country and elsewhere.

Although this situation was cleared up, the conflict of jurisdiction still remains in doubt.

In 1928 still another clash occurred between the AAU and the NCAA. In that year the National Amateur Athletic Federation, which was a federation of a large number of organizations fostering athletics, including the NCAA, conducted an open meet. Five Northwestern University swimmers competed in the meet with the consent of the university. After the meet the AAU disqualified these five swimmers for competing in a meet not sanctioned by the AAU. As the NCAA was a strong backer of the NAAF, the Association appointed a committee to discuss the whole matter of NCAA-AAU relations. As a result the AAU later modified its constitution to allow the colleges to certify to the amateur standing of their athletes for competition in AAU meets, instead of each individual having to register and certify to his own amateur standing.

The Olympic Games were revived in 1896 by Baron Pierre de Coubertin and his associates. At that time, under the leadership of James E. Sullivan, AAU secretary, the AAU assumed control over American interests. An American Olympic Committee was formed, a self-perpetuating body having neither constitution and by-laws, nor rules of procedure. It continued to manage the American Olympic team from 1896 through 1920.

The first official connection the NCAA had with the American Olympic Committee was in 1919, when it was given one representative on the Committee and later when President Pierce of the NCAA was put on the Executive Committee.

As a result of the criticism of the 1920 Olympic Games the American Olympic Committee appointed a Reorganization Committee with President Pierce as one member. This Committee decided to form an American Olympic Association which would have complete supervision over all American Olympic affairs. The Olympic Association was to select an Olympic Games Committee which would be responsible for the conduct of the Games. At that time it was agreed and later approved by the old Olympic Committee that the AAU was to have 53 delegates and the NCAA 16 delegates out of a total of 94 delegates in the Olympic Association. However, at a second meeting of the Reorganization Committee, which President Pierce could not attend, the NCAA delegates were reduced to three.

In protesting this action, President Pierce brought out several points, two of which were:

1. The NCAA embraced nearly every institution of athletic prominence in the country: at least 350,000 athletes were represented.
2. In the Olympic Games, 1896 through 1912, 69 percent of the first places were won by Americans who were college men. The representation was equally good in the 1920 Olympics. In view of this representation of college men on teams, the institutions that they represented should be granted greater recognition, through recognition of the NCAA.

Despite the plea from President Pierce, no adjustment was made in the NCAA representation, so in December the NCAA withdrew from the American Olympic Association. Over the period of the next few years, before the Olympic Games of 1924, the Olympic Association changed its constitution and bylaws to make the voting rules satisfactory to the NCAA, so the NCAA withdrew its resignation and cooperated to carry through the Games of 1924.

Again in 1926, the meeting of the American Olympic Association, according to President Pierce, became a test of strength to change the constitution of the Olympic Association for the purpose of increasing the power and control of the AAU. The constitution was changed to make the delegates, who were predominately AAU, the new Olympic Committee to run the Games. Again the NCAA withdrew from the American Olympic Association, only to resume membership in 1927, after being assured that the tryouts for the 1928 Olympics would be conducted on the same basis as for the previous Olympics. As it turned out, the NCAA representation had little or no influence on the conduct of the games.

In a memorandum in January 1928, which John L. Griffith, commissioner, wrote to the Directors of Athletics of the Western Conference, he noted that theoretically the Olympic Committee managed and controlled Olympic affairs, but actually was dominated by the AAU. For proof of this he noted that at a recent meeting the AAU had selected the Olympic coaches, named the city in which the Olympic tryouts were to be held the coming year, agreed upon the days for the trials, and made other arrangements for handling the American Olympic trials.

This fight for representation continued through 1937 when it appeared that the NCAA had equal representation on the eight games committees in which the colleges were interested.

Recent Conflict Between NCAA and the AAU

Following World War II the conflict between the NCAA and the AAU died down. However, in the last few years there has been increasing irritation over the manner in which the AAU operates amateur sports. This came to a head in a meeting of the NCAA Council in April 1960, at which time they voted to cancel their articles of agreement with the AAU.

In justification of their withdrawal, the NCAA Council brought up the following examples of poor administration:

1. Inconsistent administration—the AAU sanction fees vary and sometimes are not applied, depending on the individual or agency involved.
2. Inadequate administration of the amateur rule—the last-minute cancellation of the University of Iowa-Phillips 66 Memorial basketball game.
3. Poor handling of foreign relations—the ill-fated visit of the Swedish basketball team in 1959.
4. Inability to rally the support of sister organizations, loss of faith in the AAU by the high schools, colleges, and national coaching organizations.

The result was a series of meetings between the NCAA and the AAU to try to resolve the difficulties. The NCAA proposed a federation plan for administering athletics in the United States with four categories of membership; namely, the secondary schools, the colleges, the armed forces, and open competition. There would be a separate federation for each sport. Under this arrangement the AAU could continue to control athletics in open competition, as it does now, but would share with other organizations the rights to determine policy on a national and international basis. The AAU, on the other hand, claimed that no new organization was needed to control amateur athletics, and that they had authority from the International Federation to handle the program.

In the process of negotiation in February of 1961, a committee of the NCAA presented some recommendations to the United States Olympic Committee to correct weaknesses seen in that organization. There is no indication that these recommendations will be implemented.

Although the AAU never accepted it, the NCAA and other organizations were unwilling to let the federation idea die. The NCAA, in cooperation with other organizations, moved ahead to form federations in the sports of baseball, basketball, gymnastics, and track and field. The Track and Field Federation became active in September 1962 and began to sponsor in various parts of the country a series of meets which did not have the sanction of the AAU. The AAU retaliated by threatening to rule ineligible any athletes competing in a federation event and finally did rule some athletes ineligible.

The NCAA countered by sending a memorandum to its members on October 24, 1962, asking:

1. That the colleges withdraw from AAU membership.
2. That member institutions not enter athletes in AAU competition unles sanctioned by the appropriate federation.
3. That staff members withdraw from membership on AAU committees in the sports of basketball, gymnastics, and track and field.
4. That institutional facilities and equipment be used to further the federation activities.

As the NCAA members moved to support the Association's stand, a great deal of consternation was apparent as the season for the big indoor meets approached. Most of these indoor meets are promoted by outside organizations for the entertainment of the winter crowds in the big cities such as New York, Boston, Los Angeles, and San Francisco. Although the federations were willing to sanction these meets, the AAU was not willing to have dual sanction, which made for an impasse. In the next month two plans were drawn up at meetings of representatives of both sides. However, in each case, at a later date the AAU turned the plans down.

In January 1963, at the suggestion of President John F. Kennedy, another meeting was held, with General Douglas MacArthur as mediator for binding arbitration. Out of this meeting came a moratorium between the warring factions until after the Olympic Games in 1964.

Plans are going ahead without the AAU for the development of federations. The Basketball Federation is the only one which has word from the International Federation. The international group has proposed a temporary solution for the control of basketball, one which is a setback for the federation.

In a letter to the members of the AAU, the secretary, Stephen Archer, says, among other things: "The sole aim of this revolt on the part of the NCAA is to destroy the AAU regardless of what they say." The NCAA says the AAU takes the position that no other organization or segment of amateur athletics should be accorded a significant place in determining sports policy in the United States or in this nation's position on international sports. And so it goes.

My Ph.D. thesis, on which this paper is based, took me through the year 1942. At that time I wrote some conclusions which are as good today after this last series of episodes in the conflict as they were twenty years ago.

Basically, the issue between the NCAA and the AAU was on the type of government proposed by each organization. The AAU believed strongly in government from the top, while the NCAA believed in a federated organization which allowed local autonomy. The reasoning followed by the AAU with regard to amateur athletics is, in substance, as follows:

1. That athletics in the United States needs a central body which will control all athletics.
2. That the AAU, being the parent organization by virtue of its early beginning and the service already rendered in behalf of amateur athletics, should be the organization to control athletics, and that the AAU is already recognized by foreign organizations as the official governing body for athletics in the United States.
3. That the machinery for the government of athletics is already set up and functioning; therefore no new organization is necessary.
4. That a system of registration and certification is the best plan for ensuring amateur athletics.
5. That the colleges and universities throughout the country should join the AAU and make it the national controlling body.

The reasoning of the NCAA on the matter is as follows:

1. That athletics in the United States should be run on the basis of local autonomy rather than control superimposed from above, and that the NCAA, the high school, the YMCA, and other reputable organizations should be allowed to run their own program and that the AAU should concentrate on the athletes who are unattached.
2. That the colleges already have highly paid staffs for carrying on the athletic program and that the colleges should not have to subordinate themselves to unpaid representatives, who might be college men, but not men selected by the colleges.

3. That the colleges chose to run their own affairs; that with more than 55 college conferences in operation, in addition to the NCAA, the colleges have the machinery to run their own affairs.

4. That the NCAA questions the right of the AAU to require the sanctioning of all open meets.

5. That the NCAA does not accept the AAU as the governing body for international athletics where colleges are involved, but it does accept the American Olympic Association as the governing body for the American effort in the Olympic Games, although it feels that this organization, as constituted and controlled by the AAU, is not fairly representative of the athletic interests of the bulk of the participants.

The AAU has certain advantages in this conflict which are hard to overcome:

1. They have been accepted by the International Federation as the governing body for athletics in the United States. They have been in this position so long that they have the ear of the members of the International Federation. Without the threat of ineligibility for the Olympic Games, the AAU would have no hold over the colleges.
2. Members of the International Federation are accustomed to the control of athletics by unpaid volunteer workers. It is going to be difficult to get sympathy for our system of paid administrators and coaches.
3. The conflict can operate only about three years out of every four, as public pressure causes the NCAA to give up the struggle about a year before each Olympics.

There are a few advantages for the NCAA in this conflict:

1. They control a large proportion of the athletic facilities available.
2. The best coaches are part of its organization and under the control of the NCAA institutions.
3. The educational institutions have complete control of their athletes during ten months of the year, and probably more if necessary. Since the bulk of the athletes in all meets and contests are from educational institutions, any plan to withhold them from AAU meets would cripple those events.
4. The AAU needs the facilities of the colleges for continued development of the unattached athlete. On the other hand, the colleges have enough competition, so they do not need AAU competition for top performance.

Predictions

If history is any indication, nothing short of complete reorganization of the control of amateur athletics will cause the balance of power to go out of the hands of the AAU, as desired by the colleges. Although the colleges have, over the years, gained some concessions from the AAU, most of these have been temporary. On the other hand, I can't see the colleges giving up the fight for greater representation in Olympic affairs. Short of a change in heart by the International Federation, which I doubt, or government intervention, I can see this conflict going on for many years.

SPORT, PLAY, AND PHYSICAL EDUCATION IN CULTURAL PERSPECTIVE

FRANKLIN PARKER
University of Texas

My big question is, Why does man play and engage in sport and dignify their theory and practice as physical education? These are large questions and though I will fall short of full answers I have benefited from searching through the literature in quest of the answers. Let me start with what we know best, with sport and play in our own America.

In the beginning, Puritans frowned on sport in general and on Sunday sport in particular. In the language of the New England Primer, "Your deeds to mend, God attend." In the North, the sporting seed was lost on rocky Puritan ground. In the West, sport, play, and dancing to the fiddle were restricted to house raising festivities. In the South, Virginians copied English cavaliers in fencing, horse racing, and fox hunting. Early American sport was at first not of the common people or of the frontier. In the middle Atlantic states and elsewhere boxing, card playing—even baseball—were an upper class prerogative. In 1845, when members of the exclusive Knickerbocker Club in Manhattan played baseball, it was a genteel game for gentlemen.

But times were changing and between 1840 and 1880 America leaped from fifth to first place among industrial nations. Immigrants poured in by the tens of millions, half of them Germans and Irishmen accustomesd to the relaxed European Sunday. The Puritan Sabbath retreated before the laboring man's taste for Sunday picnics and ball games in small towns, and beer gardens and saloons in big cities. With the frontier closed, rural agrarianism in decline, and urban industrialism triumphant, sport rose swiftly. One historian, Frederic Logan Paxon, has suggested that sport was the safety valve that replaced the closed frontier. Surely in 1885, when the International Young Men's Christian Association founded Springfield College in Massachusetts as a training school for physical education teachers, sport in America had reached the age of consent. And by the turn of the century as it enlarged to include every known game, sport was already feeding back ideas to serve the American drive for speed and efficiency.

Sport had a marked effect on social custom and technological advance in late nineteenth century America. Frederick W. Taylor was a doubles tennis champion in 1881. Not long afterwards he established the time and motion study movement and fathered the scientific management revolution. It was in golf and tennis that he first saw the value of analysis of motion, the importance of methodical training, and the worth of time study.

Leland Stanford, president of the Central Pacific Railroad and benefactor of Stanford University, bet a friend $25,000 that a trotter in gait lifted all four hoofs off the ground. He hired a photographer to prove his point. Photographer Muybridge set up trip wires for a 24-camera-shot sequence. He proved Stanford correct and laid the basis for motion picture photography. The first commercial motion picture ever shown on a screen was a six-round boxing bout in May, 1895. It was the filming of boxing events that took motion pictures out of the peep show and into big time.

Radio, too, received impetus from sports. As early as 1899, when Marconi desperately needed money to perfect his wireless, the *New York Herald* paid him $5,000 to transmit via radio the finish of the American Cup yacht race.

Above all the bicycle had large influence. The cycling craze took hold after improved English bicycles appeared in the Philadelphia Centennial of 1876. Lady riders shortened their skirts and feminists had new support.

The League of American Wheelmen, a million strong at its peak, campaigned for better roads. By 1900 half the states had passed legislation for better highways. From improved bicycles came the ball bearing, wire wheels, hub-braking, the pneumatic tire, and variable speed transmission from which came automatic gear shift in cars.

The bicycle industry developed tubular nickel steel and played a key role in developing the motor boat, the motorcycle, and the automobile. Orville Wright was a bicycle racer and with his brother Wilbur ran a bicycle repair shop in Dayton, Ohio.

Henry Ford's first cars were racers. He needed financial backing; to get moneyed people interested he needed publicity. Racing car winners gave him the public attention he sought. The man Ford got to race his 80 horse-power "999" engine was a professional bicycle rider named Barney Oldfield.

After the turn of the century sport hit America with a bang. Teddy Roosevelt's Cabinet was often called the "Tennis Cabinet." By 1919 sport represented an annual expenditure of $73 million. By the 1920's, aided by radio, the spectator boom was on. Baseball, football, and boxing drew enormous crowds. During the Depression in the 1930's the trend turned toward participant sports. The Works Progress Administration alone built 10,000 tennis courts, 3,026 athletic fields, 2,261 horseshoe courts, 1,817 handball courts, 805 swimming pools, 318 ski trails, and 254 golf courses. National and state parks and fish and game sanctuaries helped extol the outdoor life.

As direct participation rose, personal attendance declined. Radio and television in our time have aided this trend. Big-time sport has become an entertainment spectacle, set up and arranged for home listening and viewing. Gate receipts have dropped; the crowds just do not come any more; advertising has become the moneyed middleman. Wrestling, boxing, baseball, and football have been turned into parlor sports.

Conversely, swimming, boating, skiing, camping, bowling, skating—in short most participant sports, whether private, school, or company sponsored—are on the rise. If, as I think, it is a healthy trend, then how can participant sports be encouraged? How can we make creative use of the participant trend to produce physically stronger and more mentally alert Americans? We are back to my original question—why does man play? Why does he engage in sport? Why do we dignify the theory and practice of sport as physical education? Let me approach some theoretical answers through a brief historical survey.

In the beginning the amoeba stirred and all its descendants moved and crawled and ran and roamed the face of the earth to find favorable life conditions. For man, from the beginning, the bodily development was imperative since efficient movement meant survival. The more efficient man, physically and mentally, led others out of danger. The root meaning of the word education is "to lead forth."

When danger was for the moment averted and food enough was at hand, prudence may have directed the channeling of surplus energy into preparation for tomorrow's challenges. From this surplus energy during earliest times of brief leisure, in imitation of previous battles, and in exultant hope for future achievement, youth may have learned to do sport and to play. Whatever the origin in the dim past, sport, play, and physical development are part of man's heritage and the necessary complement to his mind's search for understanding and meaning.

The richest blending of physical and mental activity occurred in ancient Greece. It was a rare and balanced blend. Can you remove the dance and not limit Greek drama? Can you take away running, jumping, and wrestling and not weaken Greek education? Can you subtract military training and not undercut Greek citizenship?

Physical movement and intellectual ideas were interrelated. Socrates hammered mallet to chisel on stone before he looked for virtue. Aristotle trained Alexander's body in the Lyceum before he taught him philosophy.

It is a challenge that prompts response; there is physical-emotive stirring that coincides with thought. No people, no civilizations rise except against adversity. In the desert Moses gained his insights into the Ten Commandments. Along the overflowing rivers man first controlled floods and developed agriculture.

Great as Rome was, it was surpassed by Greece. Rome's overemphasis on military training and underemphasis on intellectual concern led to wanton luxury and eventually to decline. Where mental wonder is barren and the future holds no promise for improvement, then people feed on circuses, then brute force satisfies base appetites for grim spectacle.

Unexpected good often comes out of supposed evil. With Rome in decay the barbaric hordes broke through. It took several centuries, but the Teutons who swamped the Mediterranean into the Dark Ages fused their virility into the Greco-Roman world. Physically strong and vigorous, with large families of sturdy children, these northmen assimilated and ultimately surpassed the culture they had first smothered.

Much has been said in criticism of bodily neglect implicit in the early Christian search for man's eternal soul. But monastics' cloistered walks that accompanied holy prayer and St. Benedict-inspired field labor surely aided spiritual insight. Even in ivory-towered medieval universities young scholars found physical outlets in exuberant pranks, boisterous tavern sport, and unfortunate town-gown conflicts.

When knighthood was in flower, it married feudal obligation to religious idealism. In tournament after battle, page, squire, and knight all enjoyed sport, play, and falconry.

Renaissance man turned from faith to reason, darkness to light, otherworldliness to this world. The blanket of ignorance that had hidden Greece and Rome was lifted and the humanists proclaimed man's uniqueness. In the new spirit, Vittorino Da Feltre's court school at Mantua was called "The Pleasant House." Sport, play, health, and physical development were vigorously revived.

The Reformation that split Christendom may briefly have eclipsed this revival as Protestant groups disciplined themselves in finding ways to God through Holy Writ. Out of this reform came three thinkers whose ideas had profound impact on sport and play. First, John Locke, the English Puritan, whose *tabula rasa* theory held that the mind is like a blank tablet on which experience writes. In his *Essay Concerning Human Understanding* Locke denied innate ideas. He threw doubt on the existence of Plato's divine truths, supposedly imbedded in rational thought, which proper education could nurture to fruition in some individuals. Locke's empiricism had several implications. If experience is everything, then all men are born with equal potential; human depravity is disproved; and man at birth is neither good nor bad but neutral, a being to be shaped by environment and experience. Locke's ideas formed a large basis for the English Enlightenment, the French Age of Reason, and the American and French Revolutions. From Locke flowed religious deism and philosophical skepticism.

Locke reopened an age-old philosophical problem: Does knowledge come from the rational mind or from the objective world? This problem was examined by a frail and small man, Immanual Kant (1724-1804), a German professor at the University of Konigsburg, in three books: *The Critique of Pure Reason* (1781), *The Critique of Practical Reason* (1788), and *The Critique of Judgment* (1790). The objective world, said Kant, is indeed the source of much of our knowledge—but not all. Space and time do not exist as realities outside of the mind—neither does the concept of God or religion or morality, or the sense of duty, or the sense of beauty. These the mind of man alone supplies. The senses may transmit the crude materials of knowledge but the mind has categories and structure which give meaning and understanding to complex impressions. In reinstating idealism Kant pointed to a connecting link between the physical world of things and the mental world of ideas.

It is with Schiller that I end this trilogy of great thinkers; Johann Christoph Friedrich Schiller (1759-1805), German poet, dramatist, historian, and philosopher who died in his 46th year. It was Schiller, following Kant, who gave us an aesthetic theory of play. His *Letters on the Aesthetic Education of Man* deserves to be studied by physical educators. It is profound and beautiful. Locke had said that the mind was passive and that sense impression was all. Kant had said that sense experience transmits crude impressions to the mind which through categories of its own provides meaning and substance. Schiller said that in giving meaning and substance to sense impressions, the mind does so in imagination. Schiller found the connecting link between mind and matter to be creative imagination. Aesthetics unites the sensory and the rational nature of man. It is this aesthetic link that evokes surplus energy, physical movement, and spontaneous play: it is an inborn desire to create form out of impressions. Aesthetics feeds the emotions, controls instinct, excites and relaxes the soul, awakens beauty, and sublimates passion. It explains the spirit of romance. It is the heart of the creative act. It is the sublime in education on which Pestalozzi, Froebel, and Herbart sought to build a better mankind.

It is easy to wax eloquent about Schiller's aesthetic theory of play. Philosophers have not dwelt sufficiently on it—nor have physical educators or their doctoral candidates. More research is needed on why man plays and engages in sport. Perhaps he does so to recapitulate the cultural history of his species, relive his ancestors' times of danger and victory, feel anew the trials of old, and gird himself for battle. That is one theory. Let us call it the *Recapitulation* theory.

Perhaps he does so because from infancy he has a will to power, to master his environment, to be aggressive and to win, to prove his superiority by competitiveness, to emulate and to match adult strength. Let us call this the *Will to Power* theory.

Perhaps it is because he needs a catharsis, to let loose his animal instincts, to yell and push and kick and shove and snarl away his animal nature. Let us call this the *Catharsis* theory.

Perhaps, as Schiller has said, man plays and engages in sport to give satisfaction to his creative imagination. He plays and moves and strives somehow in some way to build and create beauty. Let us call this the *Aesthetic* theory.

Why does man play and engage in sport? Probably for all these reasons. All our theories may be but variations of one theme. Man may be an unfinished creature placed on an unfinished planet in an unfinished galaxy of an unfinished universe. Even man's concept of God is unfinished. What man learns today he must relearn and redefine in tomorrow's context. Man moves because he has to move, like the amoeba, to find the best conditions for life. He must move efficiently for survival.

In this anxious age we need to strengthen both body and mind. We need release to soar into space, fresh air to overcome mental torpor, insight to move in new directions. Inner form and beauty may help dispel outer dross and disarray. Whatever makes for play in man also offers you, the physical educator, unusual opportunity. More than other teachers, you touch a deep well of interest. This taproot is there, rich and vibrant, awaiting only your nourishing direction.

HISTORY OF SPORT AS A MAJOR EMPHASIS IN THE GRADUATE PROGRAM IN PHYSICAL EDUCATION

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Insofar as is known, sport has been an integral part of every culture throughout time. It has occupied a significant place in the life of man and promises to play an even greater role in the future. H. A. Scott, in *Competitive Sports in Schools and Colleges,* states: "Down through the ages the sports activities of the people were influenced by the cultural development of the era. In turn, games and sports helped to influence the character of each successive culture. Since the beginning of civilization people have participated without restraint in the games and sports of the times." Frederick Cozens and Florence Stumpf say in *Sports in American Life,* "Sports and games provide a touchstone for understanding how people live, work, and think and may also serve as a barometer of a nation's progress in civilization."

It appears that the interrelationships between sport and other aspects of culture (social, economic, political, religious) are increasingly becoming understood to be more significant. Yet few historians fully acknowledge sport as an important item in cultural history. In physical education sport encompasses the greatest area of subject matter in terms of activity. However, little or no effort has been or is being made to train sport historians who are capable of studying and recording the tremendous impact of sports on culture.

History curriculums or, at least, history courses, are offered in other disciplines (agriculture, architecture, art, economics) and many of the most noteworthy scholars in these disciplines are those who devote their time to the teaching and writing of history. To the writer's knowledge, there are no history curriculums offered in physical education, the number of history courses offered is limited, and very few professors are devoting their time to history. If other disciplines consider the history of their subject matter important enough to include in the curriculums, why do we in physical education not consider it important enough to include in the curriculums?

Physical education departments engaged in conducting professional training programs are confined almost exclusively to training physical education teachers, coaches, and administrators, and offer very few curriculums designed to train scholars and scientists. If we in physical education hope to attain an academic status comparable to other disciplines, our curriculums should have enough flexibility to afford an opportunity for the training of scholars and scientists as well as practitioners. A program of study to train sport historians in physical education would, in my opinion, be a step in this direction.

At the NCPEA meeting last year (1963), I presented an undergraduate program of study designed for the student interested in becoming a sport historian. A student completing this would be prepared to pursue advanced study in a graduate program designed to train sport historians which permitted him time and opportunity to delve deeper into sport histories and select fields of specialization and preparation (ancient history, medieval history, etc.).

Since the purpose of this paper is to discuss the history of sport as a major emphasis in a graduate program, and since departments of physical education do not offer undergraduate or graduate programs in this area, it might be well to consider the objectives of a program to train sport historians and some of the problems which might be encountered.

The primary objectives should be to develop specialists and creative scholars and to stimulate and improve the quality of research and its use in the area of history of sport. A good graduate program for preparing sport historians is one that prepares scholars and specialists concerned with studying, interpreting, and reporting the history of sport and its immediate and ultimate need, cause, and effect—socially, economically, politically, and spiritually.

In order to accomplish these objectives, the institution offering the program should provide:

Opportunities to cover fields of subject matter in which the student needs competence.
Opportunities to become familiar with existing knowledge in the history of sport area.
Opportunities to study in related areas (art, history, philosophy, etc.).
Opportunities to conduct research.

At the present time, most departments of physical education would be unable to provide all of these opportunities because they lack the qualified faculty, adequate libraries, classroom space, finances, etc. needed. Therefore, before attempting to develop a graduate program in this area, a thorough study should be made of possible offerings and opportunities in related areas (health and recreation) and in fields having general application to the history of sport (art, history, philosophy, sociology, etc.). A curriculum could then be developed using all available offerings.

It is doubtful that a graduate program for training sport historians in one institution would be entirely satisfactory for another institution because the program of study would probably be selected from courses presently available in the physical education curriculum and curriculums of other colleges of the university offering related and/or supportive courses. A relationship which should be helpful in establishing the program may be developed by consulting experts from the related and/or supportive areas who understand the objectives of the program being designed.

Suggested requirements follow for a program of graduate study leading to the master of science degree in physical education with a major in sport history and doctor of philosophy degree in physical education with a major in sport history.

Admission Requirements

1. Minimum requirements established by the graduate school.
2. Adequate undergraduate preparation, with major in physical education and minor in history.
3. Graduate record examination aptitude test.

Master's Degree

Graduation requirements for this degree are eight units to include:

1. Four units in physical education courses. (One course should be in techniques of research in health, physical education, and recreation; remaining courses in the history of sport area or related to this area.)
2. Two units in history. (One course should be in historical method.)
3. Seminar in physical education, one semester, no credit.
4. Thesis, two units.

Doctor's Degree

Completion of the master's degree does not automatically constitute admission to candidacy for the doctor's degree. Admission to candidacy is based on previous study and work and the approval of physical education graduate authority.

The candidate is required to pass examinations in two foreign languages, an oral and written preliminary examination prior to beginning his dissertation research, and an oral final examination covering his research.

Graduation requirements for this degree are 24 units of graduate credit (equivalent of 96 hours). Credit earned toward a master's degree is counted in this total.

1. A minimum of eight units in physical education courses. (Courses should be in the history of sport area or related to this area.)
2. Four units in history.
3. Seminar, one semester, no credit.
4. Presentation of an acceptable thesis for approximately eight units.

Fields of Specialization and Preparation

Ancient History, Medieval History, Continental Europe from 1300 to 1648 (Renaissance and Reformation), Continental Europe and its dependencies since 1648, England and its dependencies, the United States, Latin America, the Near East and Middle East, and the Far East. Other fields may be accepted in individual cases.

teacher education

THE NATURE OF GRADUATE PREPARATION[1]

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Although my assignment is to comment on the nature of graduate preparation—and I assume this calls for a definitive statement—at the outset this task appears to be next to impossible. This is particularly true if one approaches the problem from the point of view of generalizing for the whole of graduate education. Perhaps meaningful and helpful insights might be developed concerning particular areas of inquiry, or the purposes of graduate education at specific institutions, or particular departments of those institutions; however, the panorama of graduate education today defies succinct definition and description.

The difficulty does not lie in any lack of published material about graduate education. In fact, this area has undergone more critical and intensive study in recent years than has any other phase of higher education. It is more likely to be found in the profusion of comments, conference reports, and findings of studies that have mounted to almost intimidating proportions. Numerous institutional, regional, and national studies have been made and conferences held which, of course, have identified many problems, but have solved few of them.

The explosion of growth in graduate school population, particularly since 1945, may account in part for the mushrooming of problems which were probably existent in dormant or embryonic form prior to that time. The graduate school population in 1959-60 reached 305,000. It now constitutes about 10 percent of college and university enrollment and is expected to reach 20 to 25 percent by the end of the century.

The graduate school itself is one of the newest segments of higher education. Even though graduate work in the United States dates back almost 300 years, it was not until science and technology were recognized as legitimate concerns of higher education that the graduate school, with its emphasis on research, came into being. Harvard established a graduate school in 1872, and Johns Hopkins followed in 1876.

Graduate work in physical education is a more recent development. Springfield College in 1891 was the first to provide such work, followed by Columbia in 1901, when a graduate degree with a major in physical education was offered. Although much of the recent growth in graduate education has been in the sciences and technology, there has also been a marked increase in the number of institutions offering graduate work in physical education and in the number of advanced degrees earned.

What are the objectives of graduate study? Historically, of course, the graduate school came into being to give body to the spirit of inquiry, investigation, and discovery which was largely responsible for the mid-nineteenth century industrial revolution and, in turn, was fed and supported by it. Its primary objective was to foster research. Graduate study, therefore, functioning within the limits of this objective, has been concerned with preparing research scholars. More recently, however, objectives of graduate study have become considerably more diverse as graduate schools responded to new demands of business, industry, government, and teaching.

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[1] Bibliography may be obtained from the author.

This is reflected in the variegated degrees offered at both the master's and the doctor's level. For example, the venerable Ph.D. has been joined by a host of newcomers such as the D.M.E. (doctor of mechanical engineering), D.S.S. (doctor of social science), Ed.D. (doctor of education), D.P.H. (doctor of public health), and the P.E.D. (doctor of physical education). At last count there are some 68 different kinds of doctor's degrees offered in institutions of higher learning in the United States. Also, among 150 master's degrees are the M.P.A. (master of professional accounting), the M.S.P.H. (master of science in poultry husbandry), the M.S.P.H.E. (master of science in public health engineering), and the M.P.E. (master of physical education).

The diversification of graduate degrees, of course, threatens to obscure the thread which runs through graduate study and marks it from the whole of higher education. Oliver C. Carmichael, former president of the Carnegie Foundation for the Advancement of Teaching, claims that the doctorate has all but lost its distinction:

> The degree symbolizes at least three years of advanced work beyond the bachelor's. There is no semblance of unity in the subject matter covered in the course work, in the kind of research pursued, in the objective of the training, or in the quality of the work. Departments in the same institution vary widely in their goals and their requirements. Indeed, in the same department individual professors differ in what they expect. . . .

Requirements for the master's degree also vary sharply over the country. Consequently it has, to a large extent, lost its dignity and good standing. For example, under pressure to provide advanced work which would qualify teachers for higher salaries, graduate schools have approved degree programs that often constitute little more than a fifth year of undergraduate work.

If a meaningful distinction can be made between graduate work and undergraduate work, it may, perhaps, be found in concerns dealing with research. The fostering of research was the primary purpose of the graduate school at its inception; it still survives, though perhaps only as a vestigial remain in some instances.

An identification of the nature of graduate education, beyond that which is revealed by the time-honored research objective, remains elusive. Even the research emphasis of graduate study has received a great deal of attention and no small amount of criticism—criticism which has come from opposite directions. There are those who deplore the mongrelization and multiplication of graduate degree programs with an attendant dilution of substance, which they identify as scholarship and research competency. There are others who charge the graduate schools with failure to meet their responsibilities in preparing men and women for teaching. They call for a greater breadth of knowledge and a greater clarity of understanding with less emphasis on research.

Perhaps as satisfactory a statement as any concerning the objectives for graduate work is the one developed for our own profession which came out of the National Conference on Graduate Study in Health Education, Physical Education, and Recreation, held at Pere Marquette State Park, Illinois—

1. To produce better teachers, leaders, administrative, and creative scholars;
2. To stimulate and improve the quality of research and its consumption;
3. To develop specialists who have preparation in particular lines of endeavor beyond the bachelor's degree.

The report of the Pere Marquette Conference is some fourteen years old. Its purpose was to provide guidance and perhaps some stimulation for the upgrading of graduate programs in physical education and the related fields of health education and recreation. It might be of some value, therefore, to take stock of where we are now. Perhaps it is not unduly masochistic, and not without benefit, to look penetratingly and objectively at ourselves as others see us.

One such person, James B. Conant, in his study of *The Education of American Teachers,* had the following to say about graduate work in physical education:

> I am far from impressed by what I have heard and read about graduate work in physical education. If I wished to portray the education of teachers in the worst terms, I should quote from the descriptions of some graduate courses in physical education. To my mind, a university should cancel graduate work in this area. If a physical education teacher wishes to enter into a research career in the field of physiology of exercise and related subjects, he should use the graduate years to build on his natural science background a knowledge of the physiological sciences that will enable him to stand on an equal footing with an undergraduate major in these sciences.

Dr. Conant summarily does away with graduate work in physical education (and I presume, in the related fields of health education and recreation) and suggests what he considers to be a satisfactory substitute. Of course, his forthright, unequivocal statement is not designed to endear him to members of the profession. It is much more likely to evoke angry responses which dismiss him as an unqualified critic, relegating him to the role of academician, egg-head, impractical dreamer, and idealist. This might be helpful as preventive therapy in the management of one's emotions; it will not do as a responsible answer to his charge.

As a matter of fact, perceptive and reflective members of the profession will concede that there is more than a little evidence which recommends taking his comments seriously. They will also acknowledge that he has been eminently fair in his study and analysis of the education of teachers. One needs only to read James D. Koerner's recent book entitled *The Miseducation of American Teachers* to be almost grateful for a Conant.

Perhaps one of the more obvious reasons why Dr. Conant came to the conclusion he did is that physical education has suffered from a long-standing case of split personality. Conant's comments would seem to point this up. On the one hand he identifies physical education as Education,[2] on the other he implies its potential legitimacy as a discipline in its own right. A perusal of catalogs and graduate bulletins reveals that the affliction is well developed.

In the latter part of the last century, physical education was well on its way toward emerging as a discipline with a well-defined and manageable body of knowledge. In response to almost revolutionary conceptual changes in educational philosophy and psychology in the early twentieth century, physical education became progressively more eclectic, fragmented, and difficult to define. At some point in this period (perhaps the historians could tell us more precisely when), physical education reached a fork in the road as it moved toward its own maturation and fulfillment. One path pointed toward pedagogy and the other toward a body of knowledge dealing with physical movement. It moved neither to the right nor the left, but astraddle. Although this feat is not particulary dfficult at the point of origin, it becomes increasingly more trying as the fork widens.

Even a superficial examination of college catalogs reveals several symptoms of a split personality. Within the structure of higher education, physical education may be located in a college of arts and sciences, in a school of education, or in a sort of academic no-man's-land called a division. Perhaps the latter is, in fact, the most apt descriptive term if physical education does, indeed, have a divided personality.

Functions performed by departments of physical education also reveal symptoms. Physical education, on the one hand, claims kinship with those departments which provide services in the area of general education, and, on the other, with professional schools or departments whose responsibility it is to prepare teachers.

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[2] Capitalized to distinguish professional education from education in general.

Even within the pedagogy framework the split nature of physical education is apparent. It offers courses in teaching methods, class organization, and program administration as one part of its subject matter major while at the same time it provides content courses such as physiology of exercise, kinesiology, the history and sociology of sport, and physical sports skills as the other part of its major.

The attachment to pedagogy leads to a multiplicity of courses to cover the hundreds of tasks that teachers need to perform. It leads to the servicing of teachers in summer programs and through extension courses with little or no regard to distinctions that should be made between undergraduate preparation and graduate work. An examination of graduate bulletins readily confirms this to be the case.

At one state university, a course entitled Tests and Measurements carries graduate credit and is described as "techniques to determine abilities, needs, and placement in the physical education program." At another, a course with the same title and a similar description carries undergraduate credit. At a third, Introduction to Tests and Measurements carries graduate credit. At another school, Officiating Major Sports is a graduate course. At still another, Teaching Individual and Dual Sports is listed as a graduate course. At a large state university, graduate course listings include Coaching Football, Instruction in First Aid, Folk and Square Dance (three hours of laboratory work). At another school, Coaching Football (study of team strategy and offensive and defensive formations for secondary and college football coaches) is offered as a graduate course. Perhaps some reform could be introduced here to segregate the losers from the winners and restrict them to an undergraduate course.

If these, by chance, are the course descriptions that Conant refers to, he is to be congratulated for his restraint. These course listings reveal no discernible rationale upon which a graduate program is predicated, they indicate no body of knowledge at the undergraduate level upon which advanced work would be based, and they give no clue as to what the profession considers to be a program of advanced work in physical education.

Critics, such as Koerner, generally regard Education as having poor credentials as an academic discipline. That facet of physical education which relates to pedagogy, therefore, shares responsibility with Education for the quality of those credentials—whatever they may actually be. The one aspect of physical education which does exhibit some characteristics of a discipline suffers from a lack of focus and depth of scholarship. Consequently, at both the undergraduate and graduate levels, the critics find little merit in either aspect of physical education's dual personality.

It may be some small comfort, however, to know that all of the confusion in graduate work is not restricted to the field of physical education and that it is not alone in its vulnerability to criticism. Doctoral programs which have been developed recently in such areas as agriculture, business administration, home economics, and engineering are similarly assailable. Dr. Carmichael, in his recent book entitled *Graduate Education: A Critique and a Program*, points out that

> The public has a right to expect more consistency and less confusion than is manifest in the 150 master's and 68 doctor's degrees currently listed in college and university catalogues. . . . The universities cannot justify the present confusion. Failure to meet their obligation to restore order and meaning in this area might jeopardize their autonomy and end in their forfeiting some of the privileges that have traditionally been considered essential to their proper functioning.

He deplores the lack of uniformity in degree requirements, the lack of common content in the doctoral programs, the failure in practice to set time limits, and the lack of agreement concerning the character and purposes of the dissertation.

Perhaps a first step toward developing a unified body of knowledge in physical education could be taken in sifting pedagogy from subject matter. Such a step would be based on the assumption that pedagogy is the business of the school or department of education. Courses in methods, organization, and administration might find a home in that area of professional work. Where relations are not strained between departments of physical education and schools or departments of education it is not at all inconceivable that working arrangements might be made for joint appointments or for the provision of advisory and/or consultant services in connection with pedagogical problems peculiar to physical education.

A second step would be concerned with determining the nature and scope of our subject matter. In this respect, noteworthy efforts have already been made at the University of California at Los Angeles. The rationale of physical education at UCLA is that concerns dealing with human movement comprise an area of inquiry which is worthy of disciplined scholarship and research and that it will yield up a consequential body of knowledge. Some of the broad problem areas which have been identified at UCLA have to do with the kinesiological nature of man, development of man through movement, development of movement capabilities, the individual's variables affecting movement, environmental variables influencing human movement, man's control of his environment through movement, and movement as human expression.

Until physical education takes these two steps, its graduate work is likely to remain confused, fragmented, and, in too many instances, even puerile.

GRADUATE PREPARATION FOR PHYSICAL EDUCATION SPECIALISTS[1]

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The context of the ensuing recommendations for preparing physical education specialists is characterized by criticism and controversy. Criticism is being leveled at the meaninglessness of physical education and the poor preparation of physical education specialists; controversy arises out of views regarding the preparation of all educational specialists.

Criticism

James B. Conant's criticisms represent typical castigations of the field of physical education and its specialists. In essence, he sees little meaning in physical education and recommends that graduate work in physical education be cancelled. Conant seems to argue that physical education is not a part of liberal education on the grounds that it does not seek ". . . to enlarge the understanding, to develop respect for data, and to strengthen the ability to think and to act rationally." Conant recommends cancellation of graduate work in physical education on the basis of the theme of his book—superficiality of preparation of education specialists.

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[1] Bibliography may be obtained from the author.

Controversy

Two fundamental issues divide teacher education: (a) General versus specialized preparation; and (b) common versus diversified requirements.

The field of physical education in particular is in the midst of these controversies because, in my personal opinion, physical educators are "jacks of all trades and masters of none." Emphasis in the preparation of physical educators over the years has, for the most part, focused unrealistically on trying to make one capable of serving in physical education as well as in one or more other fields; such as health education, safety education, driver education, community recreation, camping, and rehabilitation. In addition it has been the unrealistic expectation that the physical educator should be capable of teaching a wide variety of physical activities. These two expectations in the preparation of physical educators represent two basic reasons why physical education lacks meaning and hence public support.

It is in this context of criticism and controversy, then, that I seek to develop a theoretical framework for preparing a physical education specialist. In essence, I seek a balance of general and specialized education and a minimum of common requirements for persons preparing to serve as specialists in only one field. Moreover I view the preparation of physical education specialists as a part of a long-range, sequential, and cohesive pattern of experiences. In view of time and space limitations, this paper deals primarily with preparation through the master's degree, although some consideration is given to post master's degree study.

Redefinition

As one peruses recent physical education literature, it is clear that physical education is being redefined in terms of the science (and art) of human movement. This redefinition in turn calls for rethinking undergraduate and graduate preparation to fit the specialist for newly-defined tasks. Underlying the proposals which follow is the assumption that the physical education specialists' role is not yet fully defined since the speciality itself is undergoing change.

This state of affairs is perhaps the most fundamental problem facing the physical educator; it is essential that physical educators clarify their intentions. Once they know what they should be about it will be less difficult to prepare them. Consequently, a major part of the preparation of physical education specialists should focus on the nature, purposes, and limitations of their specialty.

Four Stages of Preparation

Although the focus of this paper is graduate education, particularly at the master's degree level, it is necessary to discuss briefly pre-college and undergraduate education as foundational to graduate study and as a part of a teacher preparation continuum. The notion that one becomes a specialist in physical education after four years of baccalaureate education must be dispelled, lest superficiality be perpetuated.

One could view the preparation of physical education specialists in four stages:

Stage 1—Attitudinal and basic skill development
Stage 2—Liberal education and human movement
Stage 3—Beginning teaching
Stage 4—Advanced teaching, administration research leadership or teacher education

Stage 1, representing school years (K-12), focuses on the development of positive attitudes toward physical education and development of fundamental movement and basic sports skills. Stage 2, undergraduate education, focuses on the goals of liberal education and the knowledge and competencies of the field of human movement. Stage 3, occurring at the master's degree level, focuses on education and the application of knowledge about and competence in human movement to teaching. Stage 4, post-master's degree preparation, has one of several objectives—advanced teaching competence, research leadership, administration, or teacher education.

STAGE 1

Fundamental to practicing the art and science of teaching physical education are at least two ingredients: (a) commitment to the value of physical education, and (b) capacity to move effectively, particularly in the realm of games, sports, dance, and aquatics.

Commitment to physical education derives from understanding the meaning and significance of human movement to life. It is highly probable that young people who have been exposed to vital programs of school physical education and have had opportunity to think and talk about the role of physical activity in their lives will develop good feelings toward physical education. In turn they may choose it as their life work. Whether physical education becomes a career or not, a meaningful program at least affects future taxpayers and members of institutional boards of control who might lend support to subsequent programs of physical education.

The capacity to move effectively is a basic tool of the physical education teacher. Without it he cannot demonstrate and probably cannot understand or recognize the critical elements to be taught or corrected. Further, it is highly unlikely (although not proven), if basic skills are not learned before college years, that they ever will be learned during college, except of course by a few inherently-skillful persons who were never exposed to physical education.

Thus prerequisite to admission to an undergraduate program of studies, with a major area of concentration in human movement, should be awareness of the meaning of physical education and demonstrated proficiency in basic movement skills related and applied to a variety of games, sports, dances, and aquatics. Such a requirement will free the student to concentrate on, and be challenged by, advanced knowledge and competence.

Rigid enforcement of these prerequisites today would eliminate a number of worthy candidates in view of limited public school opportunities for good physical education. Thus a waiver might be granted for two years to allow some prospective candidates to make up their deficiencies with a program over and above their regular work. Enforcement of the prerequisites implies the availability of reliable instruments to assess levels of attainment and further, that the desired levels of attainment are, indeed, valid predictors of successful teaching. The lack of such instruments should not deter gross efforts to assess potential success, while refined predictive tests are under development.

STAGE 2

Also fundamental to becoming a skillful and effective physical education teacher is possession of a liberal education together with broad understanding of and competence in the science of human movement. These two goals appropriately could be considered as mutual, but not separate, foci of four years of undergraduate education.

Liberal Education

Conant aptly conveys my view of liberal education when he quotes one of his friends:

> We are close to the mark if we conceive of it [liberal education] as a process and as an aspiration. A liberal education . . . is a process begun in childhood, carried on through

> a varying number of years of schooling, and best tested by the momentum it sustains in adult life. It is characterized by what it aspires to, rather than by what it embraces; it aims to enlarge the understanding, to develop respect for data, and to strengthen the ability to think and to act rationally. Accordingly, the process of educating liberally is not confined to the classroom and is not circumscribed by the subjects of study or the experiences which may contribute to it. It seeks to produce an informed, inquiring, and judicious habit of mind rather than particular abilities.

Earl J. McGrath, renowned investigator of the role of general education in the preparation of professionals in many fields, views the liberally educated man as one who: possesses essential knowledge and skill derived from the various disciplines; is skillful in the application of that knowledge for the solution of problems affecting himself and society; and can cultivate traits of personality and character to facilitate interpersonal relations.

No longer is it possible to view general (liberal) education as the "common experiences required of all educated men and women." The "knowledge explosion" has tempered our concepts, such that general (liberal) education is characterized by its functional application. Thus liberal education, during the undergraduate years, should have relevance for the student of human movement who is considering physical education as a career. There is just too much "general" knowledge and too many "general" competencies for one person to grasp and develop. Thus there must be judicious selection of liberating experiences that have relevance for one's specialty. This concept suggests close cooperation and articulation between departments representing fundamental disciplines and schools of education, lest students fail to see relevance of the general to the specific—a critical objective.

Liberal education for teachers is justified on at least two grounds. First, since emulation is a strong basis for learning, it is essential that teachers possess personal maturity and those knowledges and intellectual capacities which are central to education, lest students emulate invalid models. Second, possession of wide knowledge of man, his ideas, and his cultures should aid in enriching one's own specialty and should facilitate interdisciplinary cooperation.

The relevant content of liberal education for the future physical education specialists includes: the natural and life sciences related to human movement—mathematics, physics, chemistry, biology, anatomy, kinesiology, physiology; the social sciences—anthropology, sociology, history, psychology; the humanities—literature, writing, and speech communication. It is not intended that students necessarily take courses in the subjects listed above. Rather, it is anticipated that some learning would revolve about major social institutions and current and/or perpetual issues or problems facing society, with students viewing them from the different vantage points of their intended specialties. This would mean interdisciplinary planning and teaching.

There is one field of knowledge in the domain of liberal education that is valuable for all men to understand, but particularly relevant for educational specialists: this field is education as an institution and profession. The time has come when the liberally educated man should be educated about education—its roots, purposes, nature, scope, organization, and the nature of learning and teaching. Such study is justified on the basis that future support for such an essential social institution in a democracy is based on full understanding of it. Arising from such study should emerge commitment to the value of education together with a general understanding of what the schools and the teaching profession are like. Such knowledge then might serve as a basis for making decisions about schools and teachers in one's community or for deciding on an educational career. Moreover the prospective physical education specialist should be able to develop an educational-philosophical frame of reference into which he can fit concepts about human movement.

Two other major concepts appropriate to liberal education are health and leisure. Liberally educated men and women should understand the nature and scope, significance, and basic competencies of health care of themselves and their offspring as a basis for living a complete life. Awareness of the value of ways to use leisure for personal development or social welfare is needed as work is reduced. Associated with the study of leisure would be identification of agencies and organizations devoted to recreation. These two concepts, if treated in the context of liberal education as they should be, would set a philosophical framework into which physical education could be placed and, in turn, reduce the inordinate amount of time currently spent on health education and recreation in curriculums devoted expressly to the development of physical education specialists.

Human Movement

A second focus for the undergraduate years for the prospective physical education specialist should be broad study of the field of human movement. This might be regarded as a "major" in the sense that the student uses human movement as his major area of concentration. A student would be expected to understand the field of human movement in terms of what it is and is not and its roots, objectives, methodologies, evidence, and conclusions; he would also be expected to develop personal movement competence.

There are four components to the field of human movement—socio-philosophical, physiological, psychological, and activity.

Socio-Philosophical. The socio-philosophical aspects of human movement have their basis in areas of study like philosophy, sociology, anthropology, and history. One of the fundamental purposes of study in this area of human movement is to cause students to see the basis for the meaningfulness of human movement to life and to understand the reasons behind, and history of systematic programs of physical education. It is believed that such study would better fit the future specialist to determine the purposes, nature, and scope of programs of physical education for which he is responsible.

Physiological. Physiological aspects of human movement have their roots in basic medical sciences and the fundamental disciplines underlying them—mathematics, chemistry, physics, biology, anatomy, physiology, and neurophysiology. From these have grown a separate body of knowledge which is characterized by "kinesiology," "physiology of exercise," and "work physiology." The focus for study in this area would be to understand the physiological effect of movement on man and the capacities of man to work. Such study should better fit the future specialist to make decisions related to "conditioning" programs for specific task performance, sequential programs for skill development and units of instruction to deepen his future students' understanding about the effects of movement.

Psychological. Psychological aspects of human movement have most of their roots in psychology; some aspects are related to aesthetics. Of all the aspects of human movement, this is the most vague and thus in need of intensive search and definition. Study in this area would focus on motor learning and performance, expression and creativity, and the relationships of movement and participation in physical education activities to personality. Such study would serve to caution the future physical education specialists not to assert erroneous or nebulous claims for physical education, like "building character." Study in this area would also serve to discover how people learn motor skills and thus become a basis for lesson planning and the use of demonstration, whole-part learning, repetition, reward, and the like.

Activity. The fourth aspect of human movement is circumscribed by physical skills related to task performance and physical-education activities—games, sports, dance, and aquatics. Study in this area would be devoted to skill analysis, skill development, strategy, tactics, history, rules, and equipment. Although the prospective physical education specialist might survey this area and become acquainted with a variety of activities, intensive study and practice would be required in two or three activities. Such study should develop the basis for defining critical performance factors, analyzing performance, making corrections, and thoroughly understanding the nuances of rules and equipment so that future teaching will have substance. It is my observation that one reason for poor teaching of physical education is lack of deep understanding about and skill in physical activities. This, in turn, is one of the roots of public criticism of physical education.

It is argued by some that limiting the specialist to preparation in two or three activities would limit the scope of physical education programs, since most schools are limited to one or two instructors for boys and one or two instructors for girls. This argument is countered in two ways. First, a sequential program of activities from kindergarten to grade 12 could mean a distribution of activities across the grades so that all activities would not be taught in all grades.

Second, quality instruction in depth in four to twelve activities (two to four instructors each specializing in two to three activities) is preferred over superficial instruction in a host of activities. By employing a staff of specialists with differing subspecialties (sports), men and women can complement one another. This might mean that one instructor serves as the chief instructor in his or her sport specialties while being assisted by his or her colleagues in a team-teaching arrangement. Moreover, the administrative separation of girls' and boys' departments limits the possibility of qualitative program breadth wherein women teach girls *and* boys and men teach boys *and* girls. Mothers have taught sons and fathers have taught daughters for centuries. To perpetuate separate departments of physical education is unreasonable from the standpoint of good teaching and economy.

To review, the focuses for study during the undergraduate years are liberal education and human movement. The content of liberal education should, for the most part, have relevance for studying human movement. The time when liberal education is "taught" during the undergraduate program should be based upon a sequential and cohesive plan for studying about human movement. One could visualize liberal education occurring during all four undergraduate years. A balance in quantity of general and specialized preparation is desired with crescendos and diminuendos of liberal education depending upon the needs of the individual. As I view the overall preparation of the physical education specialist, I see heavy concentrations of liberal education in Stages 1, 2, and 4, and at periodic intervals throughout one's career. As new problems present themselves it is necessary to review or acquire the fundamental knowledge underlying solutions to them. Moreover nonspecialty study could be a means for gaining new perspectives and thus rejuvenating one's approach to life.

STAGE 3

Building upon the liberally educated and highly skilled and knowledgeable student of human movement, the next stage of preparation is to develop understanding about education as a field of work and to relate foundational knowledge and competence in human movement to teaching. Such should be the focuses for the master's degree. The objective of the curriculum should be to develop skillful teachers of physical education by combining internship experiences with formal courses and seminars.

One could argue that earlier application of knowledge about human movement to teaching would reinforce and motivate learning. Indeed, such experiences as planned school visitation and directed observation of teaching would be valuable undergraduate and graduate experiences and should be included where relevant.

In essence the master's degree curriculum would focus on education and physical education over twelve months of study, beginning with formal course work in the summer, followed by a limited number of courses and supervised internship during the academic year, and possibly concluded with a one-month program of study to derive meaning out of the previous year and to plan for the next year of teaching.

Education

Experiences and courses pertaining to education as a field of work seek to begin, at least, to reach the following goals, as set out in *New Horizons for the Teaching Profession,* edited by Margaret Lindsey:

- A vision of the possibilities of education. . . .
- How to use basic educational principles relating to the nature of the learner and the learning process. . . .
- Understanding the underlying rationale of different educational programs and how to bring about changes in curriculums.
- [Using] teaching methodology and the selection and use of instructional materials.
- Becoming an intelligent consumer of educational research and engaging in practical experimentation.
- Becoming a responsible member of the teaching profession.
- Continuing preparation for intelligent participation in community life as a spokesman for education.

Another objective of course work related to education in general would be the nature of the organization of educational institutions and general principles of administration. Such knowledge would facilitate cooperation and serve as a basis for helping the physical education specialist to administer his own program, a task he is often called upon to do.

Physical Education

Experiences related to physical education include course work and on-the-job experience. Course work would focus on:

The philosophical bases and purposes of physical education and its role in education.
Physiological and psychological factors relating to the teacher's role in facilitating motor learning.
How to teach two or three activities with emphasis on teaching methods and devices, analysis of fundamental movements and coordinated skills; problems of learners, safety concerns, and essential equipment.
Examination of the present status of physical education programs and study of "frontier" programs.
How to develop sequential programs of physical education, including syllabus, course-outline, and lesson-plan development.
Study of administrative functions and problems related to personnel, program, facilities and equipment.
Principles and methods in selection and use of available tests to assess performance and to evaluate programs.[2]

Internship. Under the tutelage of a master teacher and clinical professor, students would work (with pay) five mornings or afternoons per week for an academic year. A review and discussion of their work experiences would be the subject of a weekly two-hour seminar. Seminar topics would be presented by students based upon problems or issues arising from their jobs. Assignments growing out of formal course work would have relevance for the internship experience.

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[2] Taken in part from an unpublished report, "Proposed Master's Degree Curriculum in Physical Education," prepared by physical education specialists at Teachers College, Columbia University.

Assuming that a candidate for a master's degree has completed the undergraduate program described above (Stage 2) and assuming that he is medically fit to embark upon a career requiring vigorous physical activity, a sequential program of study might appear as follows:[3]

Summer Session		
Education and society	2 sem. hr.	
Psychological foundations of education	2 sem. hr.	
Developmental psychology	2 sem. hr.	
Introduction to educational research and planning	2 sem. hr.	
General course in curriculum development	2 sem. hr.	
Total		10 sem. hr.
Autumn Semester		
Philosophical foundations of physical education	3 sem. hr.	
Motor learning and performance	3 sem. hr.	
Teaching of (1 sport)	2 sem. hr.	
Overview of public school administration	2 sem. hr.	
Internship seminar	1 sem. hr.	
Total		11 sem. hr.
Spring Semester		
Teaching of (2 sports)	4 sem. hr.	
Programs of physical education	2 sem. hr.	
Administration of physical education	2 sem. hr.	
Evaluation in physical education	2 sem. hr.	
Internship seminar	1 sem. hr.	
Total		11 sem. hr.
Grand Total		32 sem. hr.

Noticeably absent from the above curriculum are courses in health education and recreation. Traditionally preparation in the three fields—physical education, health education, and recreation leadership—have been combined in varying degrees, the assumption being that there is much in common between them. It is contended here that there is little in common in terms of philosophies and task performance. Commonality, however, does exist at the level of general objectives as with other areas of the curriculum; also commonality exists between the preparations of health education and physical education specialists at the level of basic medical sciences. Beyond this, commonality has been imagined and incoherent.

The criticism that physical education personnel are "jacks of all trades and masters of none" emerges, in part, from the traditionally irrational expectation that they also serve concurrently as driver education instructors, hygiene teachers, guidance counsellors, and community recreation directors. Each of these positions are specialties unto themselves. The physical education specialist alone has enough to be learned without diluting his studies; moreover his energies on the job should not be spread too thin. Such dilution of energy has resulted in watered-down programs of physical education that, in turn, fail to gain support by educators and laymen.

Omitted also from the master's degree curriculum are experiences pertaining to adapted physical education. Persons using the rehabilitative modalities of massage, hydrotherapy, electrical stimulation, and heat, combined with protective strapping, prothesis and special exercise with persons possessing temporary or handicapping defects are, indeed, specialists unto themselves. Preparation for this specialty should be the focus for a separate master's degree, built upon many of the experiences described in Stage 2 and containing some of the experiences required in Stage 3. Further discussion of this subject is beyond the competence of the author.

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[3] Adapted from masters degree curriculum for physical education specialists, Teachers College, Columbia University.

A review by the author of requirements for Ed.D. and Ph.D. degrees for physical education specialists at 33 colleges and universities approved by the National Council for Accreditation of Teacher Education revealed no pattern of experiences. Further, only one or two institutions had established any subspecialty focuses around which is planned a cohesive set of experiences. Although some institutions may have cohesive programs of study for post master's degree candidates, neither printed nor mimeographed materials reflect anything specific. This is judged as unfortunate since all students need a central focus to which they can relate their study.

It is contended here that emphasis for post master's degree study, Stage 4, should emerge from the nature of major task responsibilities performed in the specialty. The focuses might include such tasks as administration, research leadership, teacher education, or the furthering of teaching expertise. Coupled with advanced study in the specialty, in the general field of education, and in liberal education, should be either a field project and report or a dissertation for doctoral candidates.

General Field of Education

Advanced study in the general field of education should include:[4]

> **The Nature of Education.** Each student should have a useful understanding of the historical, philosophical, and social bases of education, to permit him to evaluate developments in his specialization in the context of broad principles and policies, and to provide a common means for communication and action with professional colleagues in other specialties.
>
> **The Nature of Persons and of Learning Processes.** Each student should understand the process of learning, and have some acquaintance with the personal, developmental, and social factors which affect behavior and learning, with relevance to teaching and other educational processes involved in his specialization.
>
> **The Methods of Evaluation and Research.** Each student should understand (a) concepts and techniques used to evaluate educational processes and products relevant to his specialization, and (b) research methods used to expand knowledge in education.

Whereas the master's degree curriculum, Stage 3, introduced students to teaching, post-master's degree study should prepare the student to perform as a true expert—an administrator, a teacher educator, a research leader, or a master teacher. In addition, special study should include advanced courses relating to the substance of the body of knowledge of human movement, and current issues and problems facing the field.

Field Project Report or Dissertation

A field project report or dissertation would be based on an investigation or experiment, closely related to the major focus of advanced degree work. Moreover courses should be selected to prepare the student to accomplish his investigation or experiment.

Integrated Program

Thus career goals, task performance, formal courses, and project report dissertations are parts of an integrated program of study built upon master's degree requirements described in Stage 3. This arrangement precludes amassing of points by means of cafeteria-style graduate education, wherein courses are taken at convenient times or at the whim of the student.

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[4] Committee on the Degree of Doctor of Education, Teachers College, Columbia University, "Program of Study for the Degree of Doctor of Education," Unpublished report, December, 1963.

As previously indicated, delineation of a post master's degree curriculum is reserved for another paper in view of the complexity of the task and time available.

Summary

Preparation of the true specialist in physical education has its roots in the acquisition of favorable attitudes about physical education and the development of basic movement competence during school years. Substantive knowledge of and refined skill in human movement, along with heavy emphasis on liberal education during the undergraduate years completes the foundation for preparing the physical educator. At the master's degree level is found a study of the application of already acquired knowledge and competence to the field of teaching together with study of the nature of learners and the teaching processes. Finally, at the post-master's degree level following several years work experience, does the true specialist and expert emerge. At this educational level the mature student pursues a curriculum geared to his career goals in terms of major task responsibilities.

This theoretical framework of specialist preparation seeks to belay valid criticism of the meaninglessness of physical education and the superficiality of physical education specialists. Advocated is deep understanding of the field of human movement, a separation of physical education from health education and recreation, and emphasis on becoming expert performers and teachers in only two or three sports.

REFLECTIONS ON SELF-UNDERSTANDING FOR THE PHYSICAL EDUCATOR[1]

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Possibilities for self-discovery are inherent in physical education. Because of the particular role assigned to the physical educator in this culture—as a symbol of masculinity and as a figure of identification—he is in a unique position to influence the growth of his students. If the physical educator is to utilize these potentialities and accept the responsibility for guiding his students toward greater self-understanding, he must also learn to deal effectively with conflicts in his own life. This process should be initiated in professional preparation.

Understanding Motivation

The motives that operate in the choice of physical education as a profession are probably as complex and varied as in the choice of other professions. As in other professions, the motives may be negative as well as positive. The physical educator with unmet and unrecognized psychological needs may do a great deal of harm unwittingly by projecting emotional problems into the physical education situation. It is entirely possible for a teacher to obtain good results in terms of athletic success but to have a negative influence on the personality growth of his students.

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[1] Bibliography may be obtained from author.

For example, a teacher may be drawn to physical education to reassure himself of his masculinity. He may ridicule a student who shows an interest in dance, make fun of another's physique, or belittle those who lack athletic ability. He actually may need to call attention to the shortcomings of others in order to reassure himself that he is a man. Another teacher may have an unresolved conflict concerning his own need to be an outstanding athlete. He may devote all his energy to boys who fit this category, while neglecting the majority of students and only going through the motions of conducting a program.

Still another physical educator may use competitive triumph to compensate for his low self-esteem. If he projects this motive into the program, unhealthy situations are bound to develop. He may exploit his players as means of vanquishing others, and he may regard those students who resist his drive as potential enemies. There are coaches who push their players unmercifully. These men are apt to complain about the softness of the younger generation and dwell on how hard they worked during their own playing days.

A teacher may be attracted to physical education because he feels he is intellectually inferior. He regards it as a profession which will not demand much of him in this respect and he may ridicule those students whose interests are primarily intellectual. He is apt to miss the relationships between physical education and other disciplines, and to conduct the program on a purely "muscular" level.

It is difficult to estimate the extent to which these and other negative motives influence the choice of physical education as a profession, since few studies have dealt with the subject. Undoubtedly, many teachers are influenced to a large extent by positive, healthy motives, but in others it is likely that motivation is mixed.

Schaffer, in a recent study, received responses from 329 male physical education majors in New York City to a questionnaire designed to determine the reasons for their choice of physical education as a profession. He found that the largest number of respondents stated that they had selected the field because they enjoyed working and playing with youngsters and adults in sports and recreation. Others stated that they preferred physical education to being "cooped-up" in a classroom. Some looked forward to long vacations, and still others were advised by coaches to change their majors to physical education in order to remain eligible for a varsity sport. Students also were requested to write on "What kind of a person do I think I am?" both positively and negatively. On the basis of responses to this question, Schaffer concluded that only a small number of students appeared confident enough to describe themselves in a positive manner, and that only a small number appeared to understand that they had shortcomings. Both conclusions seem to suggest a lack of awareness on the part of respondents. Schaffer did not attempt to analyze these responses other than to list them in positive and negative categories.

Acceptance of Continuous Self-Evaluation

If physical educators are to accept the process of self-examination as a necessary step toward their own growth and the growth of their students, the logical place to begin is in the teacher education program. Few other fields offer so many opportunities for the student to examine his beliefs and values, his actions and reactions, and to see contradictions between his professed and real purposes. This implies more than a sterile or abstract examination on a purely academic level. Surface acceptance of concepts such as the detrimental nature of excessive competition has little value if there is no corresponding change in attitude and personal practice. Prospective physical educators must take into account the experiences of their own lives which are meaningful to them emotionally, socially, and intellectually. This presupposes strong emotional involvement, rather than detached observation.

The physical education major encounters a wealth of potential laboratory experiences in his classes, on his varsity and intramural teams, and in other extracurricular activities which may range from dance and drama to weight training. He can be helped to utilize these in examining his motives and values, the ethics of the profession, and discrepancies which may exist between the two. If the groundwork for this process is laid in undergraduate preparation, the student can continue to use it when he accepts a teaching position and becomes responsible for the personality growth of his students. Inservice education programs may be based on the same quest for self-understanding.

The intellectual approach to problems can provide an excellent springboard into more personal analysis. For example, Costa has collected a number of cases dealing with problems in professional ethics. An examination of these and similar cases could be the catalytic agent for an inquiry into personally significant situations which students themselves have faced.

The factors which influence a decision in physical education may be numerous. Even a situation which in hindsight appears to have been relatively simple may seem insoluble in the heat of the moment. This is illustrated in a situation involving Dean, a high school junior.

> Dean was a member of his school's track team, and had shown promise in sprints and in the broad jump. He developed a pulled hamstring, which was not a particularly serious injury, but which caused considerable pain when he ran strenuously. In a closely contested meet with a nearby school, it was clear that the broad jump would be a crucial event, and this was Dean's specialty. As the jumping progressed, it became apparent that the team's only hope for victory in the event and in the meet lay with Dean. He approached the coach and asked anxiously whether he should try one or two jumps. His doctor had advised him that he would not harm his leg permanently if he warmed up properly and limited his participation, but that if the pain were still severe, his performance would suffer, and he might lengthen the time required for complete recovery. Unfortunately the coach was somewhat disturbed at that point by the lack of team loyalty which had been demonstrated by several other boys during the course of the afternoon. He listened to Dean and tried to explain that this was a decision which he would have to make on his own, but some of his anger was expressed in his voice and Dean felt that the coach was angry with him. A few minutes later Dean spoke with the coach again and they temporarily resolved the conflict by deciding that Dean would try one jump.

The elements which made the ethical decision difficult were the emotional factors operating on both Dean and his coach. Both wanted very much to win the meet and realized that Dean's jump might contribute to this end. Both were also aware that, although there was no serious danger involved, Dean's participation could mean that his recovery would be delayed. Dean was in conflict over the natural desire to avoid pain and a feeling of responsibility to his teammates who were urging him to jump. The coach's annoyance with other members of the team interfered with his ability to evaluate Dean's situation, and he failed to give Dean the direct guidance he needed. The alternatives available in this situation all were bound to produce dissonance, and the "right" choice was, therefore, difficult to determine. In retrospect, it would have been wiser to have discouraged Dean from jumping, but the coach was unable to see this clearly at the time.

The process of making ethical choices would be simple, if absolute standards could be applied to all situations. Unfortunately, the physical educator will face many choices which defy simple ethical solutions, and in which dissonance is apt to result from any of the possible courses. Discussions of the kind of ethical decisions which are typical of the profession is another possible method of stimulating student awareness. Ethical choices such as those listed below may serve as examples.

Is the main emphasis placed on winning in athletic contests, or are the means to be employed given equal importance? Are hostile and sadistic tendencies encouraged in contact sports to guarantee victory, or is concern shown for the development of positive social behavior in students? Are injuries faked to delay a game or fights purposely sought in order to remove the opposing stars from the game, or is the game played without covert sidestepping of the rules? Are opponents humiliated by "running up" big scores, or are the feelings and self-respect of the losing team considered?

Is a boy called "yellow" if he is reluctant to play when he is injured, or is he kept on the sidelines until he is fully recovered and no longer in danger of further injury? If a boy has great ability, but is medically unfit, is his desire to play exploited, or are his long-term interests protected? Is preferential treatment given to better athletes, or is an honest effort made to treat all students equally?

The following questions might be posed in connection with practice teaching.

Are the activities included in the program only those preferred by a teacher, or is a wide variety of activities offered? Are standards of achievement arbitrarily applied for all students, or is some effort made to set reasonable and challenging goals for each student? Are students of all levels of ability grouped together, or are they placed in competitive situations with others of comparable ability?

Are the skills taught primarily those of the so-called major sports to ensure talent for varsity teams, or is proper consideration given to teaching students skills which will be valuable to them for the rest of their lives? Are school programs so organized that a "farm system" exists for intercollegiate athletics, or are activities adapted to the age levels and needs of the students?

Are some activities taught repeatedly at different grade levels with little consideration for changing abilities, or is the student challenged by the introduction of new activities and by continuity and progression when repetition is necessary? Does the physical education department cooperate in instructional ventures with other departments, or does it function in isolation (even from the women's department)? Does the physical educator accept his responsibility to interpret the broad purposes of the program to the community, or does he allow outside pressures to affect the operation of the program, even when this may lead to unsound educational practices?

The correct ethical choice appears self-evident in many of these questions but, in actual practice, numerous pressures may make them difficult. A rigid ethical code may provide a false sense of security, since there are occasions when the strictly ethical choice may actually be opposed to the emphatic choice. For example, a teacher may cleverly conceal an intentional error in a baseball game in order to create for a child a badly needed opportunity for success. From the strictly ethical point of view this action may be considered wrong, but it may have contributed a great deal to the child's psychological health. Of course, this does not mean a teacher should "fix" the outcomes of a competitive situation, but it does demonstrate the shortcomings of absolute standards.

In life situations these choices are rarely as logically opposed as those stated. The alternatives posed, however, highlight the relationship of the conduct of the program to an underlying philosophy of life, and the role of the physical educator in interpreting it.

If the entire process is approached in terms of insight and growth rather than in finding fault, those involved will feel less need to defend themselves and will be free to examine the causes of their behavior. There may be some who will try to please the professor by surface acceptance of his point of view while going about business as usual. But in the proper atmosphere the majority will raise realistic questions, will examine internal and external pressures on themselves and others. Some persons inevitably resist this type of self-examination. As Jersild points out, "The more insecure a person is, the more desperately he will feel the need to remain rigidly set in his ways. But to one who is secure enough within himself to face his thoughts and feelings when the opportunity arises, the process is challenging and rewarding."

Jersild points out that when a teacher helps his students in the process of self-understanding and self-acceptance, he does not (and must not) take on the role of a psychiatrist or professional psychologist. He states, however:

> Every teacher in his own way is a psychologist. Everything he does, says, or teaches has or could have a psychological impact. What he offers helps children to discover their resources and their limitations. He is the central figure in countless situations which can help the learner to realize and accept himself or which may bring humiliation, shame, rejection, and self-disparagement.

Jersild's statement is particularly pertinent to the physical educator. The physical educator is in a unique position to guide young men in the process of self-discovery. He is the one who creates the atmosphere, who can encourage or discourage healthy attitudes toward masculinity, competition, ethical conduct, and acceptance of the body. His ability to accomplish these things depends on the example he sets in his own life and on his willingness to face his own problems and strive for knowledge of himself.

Undoubtedly, many professional programs include experiences which offer students opportunities to examine personal motivations. Self-understanding might be considered a natural outcome of good teaching. But good teaching cannot be left to chance or intuition; it must be cultivated.

EVALUATION OF UNDERGRADUATE PROFESSIONAL PREPARATION PROGRAMS IN PHYSICAL EDUCATION

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Concern for the professional programs in physical education is neither an innovation of the space age nor the result of the physical fitness boom. Rather, it has been a process that started with the first majors in our field. Since the early beginnings of our profession, leaders have been cognizant of problems in the area of professional preparation. Even though some of these early concerns seem rather narrow or ridiculous to us today, others are quite sound for then, today, and possibly for the future. A review of the literature concerning professional preparation reveals interesting facts. It is readily evident that the curriculum in professional preparation has consistently been of major concern to leaders in the field. Of almost equal importance were each of the areas of indoor and outdoor facilities. The actual teaching was mentioned very little in the literature, perhaps because of the difficulty of evaluating teaching or perhaps this may be attributed to an assumption that a staff with education and experience plus adequate curricular offerings guarantees good teaching.

The literature indicates ambiguity and a lack of agreement in the matter of standards for professional preparation. However, most professional physical educators would agree that certain minimal standards are essential and indispensable for schools concerned with the preparation of future physical education teachers. Furthermore, each of our students in physical education has the right to demand, if need be, a professional program that will afford him the opportunities necessary to be competent in the field of physical education.

Additional proof that there is a need for certain minimal standards may be found by noting the great differences that exist among institutions which prepare teachers of physical education. There are institutions in which the entire physical education staff is composed of three people. This staff would possibly offer a major in physical education, a required physical education program, an intramural program, and coach six intercollegiate sports. One institution may have several gymnasiums or teaching stations, while another institution may have just one. Some institutions may have excellent physical education activity programs and others may have none at all. Surely with such wide variances in staff, program, facilities, and other aspects of the professional preparation programs in physical education, we need some over-all standards that are indispensable and essential for a school preparing physical education majors. This situation is not limited to one state or region, but rather it exists throughout the country. The concern for minimal standards of professional preparation for all schools which prepare physical education teachers is neither a plea for conformity nor a cause for alarm about losing individuality, but rather a plea for our survival and recognition as a discipline among the undergraduate curriculums. It is my contention that this survival and recognition depends upon our collective ability to define, maintain, and upgrade standards of professional preparation.

So far, two facts are evident: there has been a concern about professional preparation and this concern is still prevalent today. Several attempts have been made to devise standards for professional preparation. These have been broad, generalized standards that have placed the emphasis on the integrity and wishes of the evaluator, rather than on the specific standards of professional preparation.

Dr. Karl Bookwalter, the president of this association, devised a score card with specific, attainable standards, each of which was weighted. The initial step in developing this score card was to locate pertinent and authoritative sources concerning higher education in general and the undergraduate professional program in physical education in particular. From these sources the commonly recognized, unique, but related and complementary major aspects of the program of professional preparation were determined. This produced ten major areas of professional preparation, namely: 1. General institutional and departmental practices; 2. Staff standards; 3. Curriculum policies and practices; 4. The teaching act; 5. Service program and extended curriculum; 6. Student services; 7. Library-audio-visual; 8. Supplies and equipment; 9. Indoor facilities; and 10. Outdoor facilities.

For each of these ten major areas, subordinate second order parts were determined. For example, Area 2, Staff standards, includes the subareas of number, qualifications in their major field, experience, teaching load, and professional status. Then the standards of quality or quantity of each criterion necessary for the effectiveness of the respective minor parts of the program were determined. For example, under Area 2, Staff standards, the subarea, qualifications in their major field, includes six specific items concerned with qualifications, such as: all teachers on the staff hold at least the master's degree. For each item, partial steps toward the attainment of each standard were determined. In the previous item mentioned—all teachers on the staff hold at least the master's degree—the partial steps towards this are: 50 percent, 70 percent, all do. Each of the ten areas, their subareas, and relevant standards or items were assigned defensible and useful numerical, weighted values. Values or weightings were also assigned to partial compliance for a given standard or item. So, in the example used: the area—staff standards—had a weighted value of 121 points of 1,000 points for the total score card; the subarea—qualifications in their major field—had a weighted value of 23 points of the 121 points for that area; and the one item or standard under this subarea—all teachers on the staff hold at least the master's degree—had a weighted value of 5 points of the 23 for that subarea. The partial steps were weighted as follows: 50 percent (1), 75 percent (3), and all do (5).

The validity of the score card was established by determining the logical relevance of the areas, subareas, and items by gleaning from the related literature and by critically evaluating the areas, subareas, and items in light of the experience and background of the author and members of five or more seminars concerned with professional preparation. The weighted value for each area, subarea, and item was established in the same manner. Furthermore, many of the items or standards were obtained from sources which were validated by a jury vote of leaders in the field.

Each item, subarea, and area presents a philosophy or point of view documented from accepted literature. These are not completely in keeping with my philosophy nor the philosophy of the author of the score card. However, to determine which philosophies and standards were essential to a sound program of undergraduate preparation in physical education, they were all included in this score card. This necessitated a score card composed of 355 items or standards. It seems plausible that some of these 355 specific, attainable standards are essential to professional preparation in physical education and that they can be identified.

After coediting the score card, reviewing the literature again, and conducting a pilot application, the score card was applied to selected colleges and universities in the state of Indiana. For each institution the existing conditions, policies, practices, and facilities were scored and recorded. After the collection of the data for each item of the score card, the subarea scores were obtained by adding the item scores; the area scores were obtained by adding the subarea scores; and the total score for the institution was obtained by adding the area scores.

An analysis of the institutional total scores, as measured by the percent of attainment, presents some significant findings. The average attainment of the total possible score was 67.9 percent. Six of the 15 institutions evaluated scored greater than the mean and nine scored less than the mean.

Whereas the actual identity of the institutions must remain unrevealed, it should be pointed out that among the top seven institutions, four were state supported. The average attainment for the four state supported institutions was 77.2 percent, as compared to the average attainment of 64.6 percent for the 11 privately supported institutions that were included in this study. This indicates that in Indiana, the state supported institutions, generally speaking, are better qualified to prepare physical education teachers.

Two of the institutions classified as state supported were also designated as teachers colleges according to their stated purpose. The average attainment of these two institutions was 74.5 percent. Six of the institutions were classified as having university status, because of the stated purpose of the institution; their average attainment was 71.3 percent. Seven of the institutions were classified as having liberal arts college status; their average attainment was 61.9 percent. This indicates that teachers colleges, generally, are doing a better job of preparing majors for the field. Both of the teachers colleges were also state supported.

Additional significant information was revealed when the percent of attainment for each institution was studied in relation to the enrollment of the undergraduate student body. The average attainment for enrollments over 10,000 was 79.9 percent as compared to 70.4 percent for enrollments between 2,000 to 10,000; as compared to 62.9 percent for enrollments between 1,000 to 1,999; and as compared to 62.1 percent for enrollments less than 1,000, indicating that the larger the school, the better qualified in the area of professional preparation. When the type of institution and the enrollment of the undergraduate student body were combined, the same general conclusions can be made. As enrollment increases, the percent of attainment increases and as we go from the liberal arts college, to the university, to teachers college, the percent of attainment also increases.

By organizational structure, seven of the institutions were departments of a division or a school within the total institution. The average attainment for these seven institutions was 75.7 percent. The remaining eight institutions were departments within the total institution; their average attainment was 64.5 percent, indicating that for the institutions with departments of physical education within a division or a school of physical education, the total institutions are better qualified to prepare physical education majors.

The discriminative power of each item was analyzed by means of an item discrimination formula. It seemed logical that certain items would discriminate between good and poor institutions, insofar as undergraduate professional preparation in physical education was concerned. Furthermore, using item discrimination, these items could be identified. Of the 355 items in the total score card, 111 items were good discriminators, 109 items discriminated poorly, and 24 items discriminated negatively.

In determining the items to be kept for a revised score card, the following techniques were used. The first consideration was given to the item's discriminative power. Next, by analyzing reactions of the persons interviewed and my experience with the functioning of the items, logical revisions were considered. All items that were good discriminators were retained. Many of the items that discriminated satisfactorily and poorly were revised or eliminated from the score card. A few of the items that discriminated negatively were kept, in light of the findings in the literature and in the judgments of persons being interviewed. An example of such an item was that there is a diversity of institutions in which the faculty members have earned their last degrees. Many of the institutions have become inbred by hiring their own graduates. A review of the literature indicates that only ten percent of the faculty should be from any one institution.

In the final revision, there are 235 items which have reduced the score card by about one-third. It would have been ideal to go back and evaluate these same schools with the revised score card, in order to again determine its discriminative power, but time did not permit. It would, similarly, be an advancement if someone would take another state or several states and apply the original score card to see which items could be eliminated or revised. However, these two investigations have not transpired, so we have only the material at hand with which to work.

This has been a good educational experience from the standpoint of being exposed to a variety of programs, facilities, and points of view. A score card of this kind presents to the administrator of physical education areas, subareas, and items of a specific, attainable nature which provide a basis for self-evaluation and improvement. Also, these recommended standards emphasize strengths and weaknesses in a program of which the administrator may not be aware. Likewise, this score card would provide the administrator with defensible evidence in his discussions with the college or university administrators.

The score card is by no means in its final form; evaluation is a continuous process. The NCPEAM has consistently been in the forefront in the area of evaluation of professional programs in physical education. In order to grow as a profession, we must define and maintain essential standards that are carefully designed and rigidly controlled for every institution offering a major in physical education, regardless of the philosophy or purpose of the institution, department, or personnel.

Our survival and recognition as a discipline among the undergraduate curriculums depend upon our ability to identify, implement, and enforce these essential and indispensable standards.

IMPLEMENTING THE RECOMMENDATIONS OF THE NATIONAL PROFESSIONAL PREPARATION CONFERENCE

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The American Association for Health, Physical Education, and Recreation sponsored, in January 1962, the National Professional Preparation Conference for Health Education, Physical Education, and Recreation Education. The report from this conference has been studied by professional groups throughout the United States, and efforts have been made to implement the recommendations. Texans have been among those who are using the report of the National Conference in striving to improve programs in teacher education. It should be noted, however, that the efforts in Texas have not been directly a result of the report, since the Texas Association for Health, Physical Education, and Recreation in 1959 scheduled the first of three conferences on teacher education. This initial conference was part of a state-wide study of teacher education in all areas begun several years earlier under the direction of the Texas Education Agency.

In discussing the use of the report of the National Conference, it seems appropriate to describe these initial efforts and to explain the present framework for teacher education. As in many states, the approval to teach in Texas is based on meeting standards for teacher certification and for school accreditation. Prior to 1955 a person could earn a general teaching certificate by completing 24 semester hours of courses in education and 24 hours in an academic subject. This person was entitled to teach at any grade level in his major or in any subject in which he had 12 semester hours of college credit. The certificate was issued on presentation of evidence to the State Department of Education that one had completed the required number of hours in education and in the teaching subject irrespective of what the courses might be.

Since 1955, teacher certification in Texas has been based on the approved program concept. By this method the colleges and universities develop programs, and any person completing a program approved by the State Department of Education is certified to teach. Programs may be developed for the Elementary Certificate entitling one to teach in grades 1 through 8 and for the Secondary Certificate good for teaching one's major and minor fields in grades 7 through 12. Programs for All-Level Certificate qualify one to teach such special subjects as music, art, and health and physical education in all grades. Institutions were given considerable freedom in developing programs as long as they adhered to standards adopted by the State Board of Education. For example, each program had to include 45 semester hours of general education covering such areas as social sciences, humanities, sciences, and aesthetics, and 24 hours of education with 6 hours in student teaching. Programs for the Secondary Certificate had to require 24 hours in a major and 18 in a minor or 36 hours in a major with no minor.

In response to pressures from both lay and professional groups, the State Board of Education in 1962 revised the standards for teacher education. For example, the 45 hours of general education was changed to approximately 60 hours in academic foundation courses to include 12 hours of English, 6 hours of history, 3 to 6 hours of government, and 12 hours from two of three areas of mathematics, science, and foreign language. The education requirement was reduced from 24 to 18 hours, and the 18 hours is considered a maximum as well as a minimum. For the Secondary Certificate the student must complete a minimum of 24 semester hours in each of two subjects or 48 hours in a composite area. The only composite areas approved to date are social studies, natural science, music, and business. Health and physical education are treated together as a single subject, and attempts to obtain approval for them as a composite area have failed.

The 1962 standards are specific for the academic foundations, but still are quite general for the education and subject matter requirements. Realizing this, the State Board of Education, in January 1963, created twelve committees to formulate standards for courses and course content in each subject matter area and for the Education sequence. One of the twelve committees was assigned the responsibility of proposing standards for health and physical education. In formulating its recommendations, this committee immediately sought the assistance of professional personnel in health and physical education. After two state-wide conferences sponsored by the Texas Association for Health, Physical Education, and Recreation, proposed standards for teacher education in health and physical education were submitted to the Texas Education Agency. These proposals can be summarized as follows:

1. The teacher education program in health education and physical education should develop those competencies necessary for effective teaching of these subjects in the public schools. This implies the acquisition by each student of the skills and knowledge in the physical education activities and in the health education units contained in the state curriculum guides for these subjects.

2. The college curriculum should include content areas as listed hereinafter for the fields of health education, physical education, and the supporting natural sciences. Each of these content areas does not necessarily constitute a three semester hour course. Rather, institutions are encouraged to combine areas where appropriate into a single course offering.

Health Education

Personal and community health education
Administration of health education
Principles of health education
Health curriculum in the schools
Health program, healthful school living, and health services in the schools
Techniques and materials in health education

Physical Education

Administration of physical education
Principles of physical education
History and philosophy of physical education
Physical education curriculum in the schools
Techniques and materials for teaching physical education
Measurement and evaluation in physical education
Adapted physical education
Physiology of exercise
Kinesiology
Organization and administration of intramural sports
Coaching interschool athletics
Athletic training and conditioning
Techniques of officiating
School and community recreation
Skills in physical education activities

Supporting Natural Sciences

General biology
Chemistry
Physics
Anatomy and physiology
Bacteriology

3. Courses devoted to the coaching of interschool athletics and the development of skills in physical education activities must be in addition to the minimum requirement of 24 semester hours in health and physical education.

4. Of the basic 24 semester hours, at least 25 percent must be in the content areas in health education and at least 50 percent in the content areas in physical education.

It will be recognized that the content areas listed above are similar to those contained on pages 65 to 70 of the report of the National Professional Preparation Conference. The national recommendations go much further and itemize specific competencies under each of the content areas. Individual institutions are urged to examine these competencies as they develop courses for the various content areas. It is contemplated that additional state-wide meetings will be held in Texas to study in more detail the competencies recommended by the National Conference.

SOME OBSERVATIONS REGARDING THE FIVE-YEAR PROGRAM[1]

REUBEN B. FROST
Springfield College

> Tomorrow we should be able to look back upon today's four-year programs with the same benign smile with which we look back upon the simple teacher training class or one or two-year normal school of fifty years ago.

These were the words of Vincent J. Glennon as he discussed in 1957 the future of teacher preparation. James D. Koerner, on the other hand, expressed a different view in 1963 when he wrote:

> . . . but the accelerating movement toward making five years of preparation mandatory for all new teachers is ill-advised. It merely takes the pressure off the undergraduate programs to improve themselves, and it inflicts an enormous and unnecessary burden on an already overtaxed system of graduate education. Four years are ample, provided they are wisely used.

Thus is the battle joined. We feel a tug here and a push there. We try to think our way through to a logical and rational conclusion. Finding this difficult, help is sought from others, who, down through the years, have dealt with this problem. We find that professional preparation in physical education began in this country about a century ago with a ten-week course which included instruction in anatomy, physiology, hygiene, and gymnastics. The time required increased rapidly, however, and there developed in rapid succession one-year programs, two-year programs and then the four-year traditional program which became the accepted one for institutions preparing teachers for a career in physical education. Whether this occurred because it seemed to be the vogue or whether it resulted from a careful evaluation of the time necessary to acquire the desired competencies is not entirely clear. The desire to keep step with other teacher preparation programs no doubt played an important role but all educational programs were also becoming more systematically planned and at the same time evaluation was growing more scientific.

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[1] Bibliography may be obtained from author.

As requirements for admission and selection were becoming more specific and generally established in other subjects they were also being adopted in physical education programs; as graduate work expanded in other fields it became more prevalent in physical education; as certification requirements increased in number and stringency, courses were added to the ever-growing number of physical education curriculums across the country. Specialized professional education in physical education was now demanding its share of the time.

Education became more organized. Pedagogy assumed a more important role. At the same time the liberal arts advocates and those who believed in the importance of science and technology were not silent. Soon the days became too short and the years of the traditional college course too few to accomplish everything which was deemed desirable and important in teacher education. Offerings which were relatively new and therefore still on trial began to feel the probing eyes of those who were wondering where and what to eliminate. Often the decisions with regard to curriculum were decided on a basis of tradition, the loudest voice, or the greatest influence. Because almost everything in the teacher preparation curriculum could be defended on some basis or other, the solution appeared to lie only in the increase in the length of the training period. And thus began the cry for the five-year program.

Five-year programs are not a new idea. From the early thirties to the present there have been frequent recommendations for five, six, and even seven-year courses of teacher preparation. Throughout this period there have also been dissenting voices. Many of the arguments on both sides of the controversy appear to have merit. One can find, both in the literature and among educational leaders of today, support for a position against and in favor of the five-year program.

It is improbable, therefore, that we will arrive at answers which will go unchallenged or even present opinions which have much unanimity. An attempt will, however, be made in this presentation to indicate some of the most recent thinking and, in some instances, majority opinion with regard to this subject. Two basic issues may be expressed as follows:

1. Shall the standard program for the preservice preparation of physical education teachers consist basically of four years (nine months each) or shall it be extended to include a fifth year?
2. If the five-year plan is accepted as standard, what pattern or type of program shall be followed?

Recent statements from two widely accepted sources indicate somewhat divergent opinions with regard to the first of these two issues. After a week's consultation, the 125 participants in the 1962 National Professional Preparation Conference concluded that:

> If professional education is to meet the challenge of providing a broad general education in addition to upgrading the professional offering, it is essential that institutions preparing teachers in the areas of health education, physical education, and recreation give consideration to the establishment of five-year programs or their equivalent. In such programs the emphasis should be upon systematic five-year continuous preparation for teaching.

In a book published a little more than a year later James B. Conant wrote,

> On the basis of these agreements, I come to my first recommendation concerning state certification:
>
> 1. For certifying purposes the state should require only: (a) that a candidate hold a baccalaureate degree from a legitimate college or university, (b) that he submit evidence of having successfully performed as a student teacher under the direction of college and public school personnel in whom the State Department has confidence, and in a practice teaching situation of which the State Department approves, and (c) that he hold a specially indorsed teaching certificate from a college or university which, in issuing the official document, attests that the institution as a whole considers the person adequately prepared to teach in a designated field or grade level.

It is obvious that all thoughtful and well-informed persons do not agree on this matter. I felt, therefore, that it would be helpful at this point to summarize some of the basic arguments employed by those favoring the five-year plan and by those opposing it.

Statements made by proponents of the plan generally include the following:

1. Knowledge is increasing at a tremendous rate. Not only is there an increase but an acceleration of increase. To achieve even a reasonable understanding of ourselves, our environment, our society, and the meaning of life requires much more time than it previously did.

2. The responsibilities of teachers have been steadily and continuously increased. Whenever something is added to these responsibilities, preparation for them must also be extended and improved.

3. *All* teachers should first of all be educated persons; because it is so important that they be accepted in the academic world, it is even more important that physical education teachers be liberally educated. And Dr. Conant, noting the large number of them moving into administrative positions, says, "Unless there is a change in the direction of this trend, I conclude that the physical education teacher should have an even wider general academic education than any other teacher."

4. The trend in state certification is toward requiring a five-year period of preparation, at least for permanent certification. To be fair to the students, they should be prepared to teach in all states and for the future as well as for the present.

5. It is not only in general education that there is more to be learned; physical education teachers must now be able to do more than just teach skills and administer exercise. Students must also learn meanings and appreciations and scientific principles. It takes much more time than it did formerly for a teacher of physical education to gain an adequate background in biology, sociology, anthropology, psychology, philosophy, and other related disciplines. Physical education teachers formerly needed to be proficient in only two or three activities. In view of the broader perspective with which physical education is now regarded, and because more diversified programs are now expected, teachers should now be reasonably proficient in 15 to 25 different skills. This requires much more time than has customarily been allotted in teacher preparation programs.

6. Science and technology, with the stimulation from sputnik and the space age, on the one hand, and arts and humanities fighting for their continued place in the sun, on the other hand, have all but squeezed out methods, and principles, educational philosophy, and pedagogy. These latter must be retained if teachers are to become master teachers. Their advocates and supporters are too few to win the "battle for the minute" against the combined forces of science and liberal arts and it is therefore necessary to make more time available.

7. Other professions, such as medicine, law, and theology have longer periods of preparation; these have not only grown and prospered as a result, but have earned added prestige and academic status. If physical education would follow a similar course a comparable position could be attained.

8. As 125 leaders in physical education, who have spent their lives in professional preparation, agreed after a full week's conference that we should move toward five-year programs, their judgment should be accepted and their recommendations implemented. The time for action has arrived; discussion and study should no longer serve as a justification for delay.

These, then, are some of the reasons given for an immediate move in the direction of the five-year program. Some additional light may be added by reviewing some of the findings of Louis R. Munch, who conducted a recent investigation in which he queried 125 physical education directors and 127 directors of teacher education programs in which five-year programs were reported to be in progress. While the main purpose of his study was to develop a proposal for a five-year program at Springfield College, he did obtain considerable information concerning the opinions of persons who had experience in dealing with this problem. With a 70 percent return from the physical education directors and an 85 percent return from the directors of teacher education programs, some pertinent conclusions were drawn. A few of the most relevant were:

1. Seventy-six percent of the respondents felt that the traditional four years were too short to prepare physical education teachers adequately and that the five-year program was essential.
2. Eighty-two percent of those replying indicated that there was no five-year program in their institution at that time.
3. The reasons listed most frequently in support of the program were the need for more general education and the expansion of knowledge.
4. The advantages listed most frequently by those having five-year programs were the provision of greater depth and breadth in the major field and the stronger general educational background.

To evaluate the validity of some of these statements, it is important also to look at the other side of the picture. Why are there many who still do not concede the necessity for a longer period of preparation? Why are there so few institutions actually conducting five-year programs?

The arguments employed by those opposing the extension of the period of professional preparation include the following:

1. With the shortage of teachers, particularly in women's physical education, we cannot afford to lose one whole crop of teachers as would be the case during the process of converting to five-year programs.
2. Present teaching and programing in physical education is so poor that we do not deserve more time either in the educational programs of those we teach or in the professional preparation curriculums. Until there is more evidence of systematic planning, progression in content, focusing on educational objectives, and the worthwhile utilization of time allotted, we have no right to ask for more.
3. In all education today there is so much overlapping, so much inefficient teaching, so much repetition, so much instructing in outmoded ways, so little employment of modern teaching techniques that the first emphasis should be on the improvement of what we are doing and not the extension of time which will permit continuation of these inefficient and undesirable practices.

4. The present pattern has much to recommend it. It provides a planned, step-by-step sequence which is now functioning effectively. For most teachers it is essentially an internship type program. They teach a few years after completing their four-year preparation, they then return to do more graduate work, and then teach again. This makes their graduate study more meaningful and profitable. The emphasis, therefore, should be on seeing that *all* teachers return to school after a short period in the field.

5. The cost of a five-year program will be almost prohibitive. With tuition increasing at a rapid rate this rise in costs will create too great a burden on students and parents.

6. The additional time required for graduation added to the increase in cost will discourage many from entering the field of physical education. Therefore another year of preparation should not be added.

Munch found that "the reasons mentioned most often for not having a five-year program were the difficulty of relating theory and practice and the added financial expenses for the students and possibly for the institutions." In schools where five-year programs were in operation, however, only a few directors indicated any difficulty in relating theory to practice.

The statements, both pro and con are no doubt vastly oversimplified. They are for the most part challenging but in many cases they are open to argument. Some observations seem in order.

One cannot help but wonder if all knowledge, past and present, must be taught Cannot new knowledge supplant the old? Is it necessary to teach outmoded theories and principles in order to understand the new? Cannot present thought in psychology, sociology, anthropology, and physical education be understood without considering all previous theories? Is much of the knowledge being taught today being included merely because it has always been part of the traditional course content?

As we observe present texts in elementary and secondary schools is it not true that much of what was formerly taught in eleventh and twelfth grades is now taught in junior high schools? And are not high school students now learning scientific concepts and languages which were formerly part of the college curriculum?

And what about physical education? We zealously guard our right to teach skills in professional preparation programs. If we could be assured that the fundamentals of all of these activities were taught in high school could we not begin at a higher level and include more theoretical material? Or are the problems of time allotment and curriculum planning in elementary and secondary schools so acute as to make it even more difficult to add to their schedule than it is in college?

How long can we avoid coming to grips with the matter of proficiency tests? If we cannot standardize the background, experience, and ability of students coming to college, can we avoid trying to plan their programs on an individual basis? Would not this shorten the required time somewhat?

Are there reasons, other than those already presented, why we have not moved more swiftly toward a five-year program? Are we not, in some instances, concerned that we might lose a top athlete to a school where he can achieve a certificate more quickly and cheaply? Are we concerned that we may lose students? Or is it because a major change such as this causes such a convulsion in the organization that it just doesn't seem worthwhile?

If the five-year plan is adopted, what pattern should be followed?

Before attempting any conclusions with regard to this issue, however, I would like to move briefly to a discussion of the second, that of the kind or type of a five-year program.

There are many who feel that the first two years of professional preparation should consist of general education and the next three of professional education. Among those advocating this "2-3 pattern" are some who are faced with admitting a substantial number of students who have had two years at one of the community colleges and/or junior colleges presently operating or springing into existence. Many of these have no preprofessional programs in physical education. For this reason it is simpler to plan similar programs for both transfers and nontransfers and the pattern consisting of two years of general education followed by three years of professional education appears to be the most feasible administratively.

The "4 plus 1" pattern also has many advocates. Those who are convinced of the success of the "Master of Arts in Teaching" programs are among its proponents and there are also many who believe that a four-year liberal arts base is good for all. Those who see value in a planned program of professional education must, however, question the possibility of squeezing it all into one year.

The "3-2 plan" is a kind of compromise between the "2-3" and the "4 plus 1." It also has its advocates and does present a more reasonable balance between the general and professional education requirements.

There are also other variations and patterns, most of which are related to those already mentioned. Discussion concerning them will never be complete. Differences in local situations and institutional philosophies will result in variations of programs. Finally, I should like to present a few simple statements indicating my conclusions at this point in the study of the problem. These are:

1. The arguments in favor of a five-year program seem to have far greater weight than do those against. I believe we should move steadily ahead toward the achievement of such a plan.
2. The systematic, integrated, continuous five-year plan where general education, professional education, and professional specialization are placed in appropriate amounts in each of the five years is the pattern which I prefer. The program should be logically and sequentially planned to assist prospective teachers to achieve the competencies which are agreed upon as necessary for outstanding performance.
3. Careful consideration should be given to the possibility of a "double-major." With the increasing emphasis on the importance of an academic major we may be protecting our students, increasing their opportunities, and giving them some general education in depth as well as breadth by this plan. For example, a five-year student who graduated with a completely acceptable major in biology and physical education would be well fortified to go on into physical education, physiology of exercise, health education, biology or, with some additional specialized training, into administration. We should be pleased and happy if teachers in other fields as well as administrators had majors in physical education. If this occurred frequently it would enhance our acceptance by educators and even by those who feel that the development of the intellect is the sole purpose of education.
4. Acceptance of students into the professional program as early as possible is highly recommended. This provides for better counseling and guidance and as a result a better educational program for the student. It has been my experience that students who begin some professional work early in their college course tend to have higher morale because they feel they are making more progress toward their goals. It also seems reasonable that to give them some work in their field when they are highly enthused makes better use of the "teachable moment."
5. Bringing physical education majors into an environment of professional appreciation and understanding at an early point in their preparation has much to do with their eventual philosophy and commitment to their profession. The words of Earl V. Pullias are worth repeating at this point:

> The institution as a whole educates perhaps more profoundly and more permanently than any specific segmented process such as single classes or teachers. Or, the experience of a course, the work of an individual teacher, is enriched, reinforced, deepened, and broadened by the wider climate in which it operates.

If we want our majors to be committed to physical education they should, at the earliest opportunity, be brought into as much contact with the department as possible.

6. While state certification requirements should not dictate professional programs, it would be unrealistic to ignore them. Each institution must decide whether it is planning for local, national, or international placement and realistically guide the students into a course of study which will best qualify them for their role.

7. Many things which apply to other phases of the educational program do not necessarily apply to physical education. We must be prepared to do our own thinking on these matters and not merely seize upon popular statements of educators in other fields and revise our programs on this basis. Five-year programs might not be necessary to prepare English teachers or mathematics teachers and yet could be essential for the adequate preparation of a physical education teacher. Likewise the "Master of Arts in Teaching" might be excellent for social science teachers but unsuitable in our field.

8. While it is expensive, difficult, and not popular, we must bring more individualization into our programs. Independent study, proficiency examinations, advisory committees, and flexibility in individual programs of study will enhance our professional preparation. The establishment of such practices will require work and a certain kind of courage and perseverance.

9. We must not forget the implications of the five-year program for intercollegiate athletics. New problems will need to be solved and new opportunities may appear. There will be proposals for an additional year of competition for athletes and if these are granted there will need to be an expansion of the program to give more opportunities for those who are unable to make the teams because of the presence on the squads of the fifth year men. National and international codes of eligibility may also need revision. We should think these implications through in advance so that we do not create too much of an upheaval in the already complex world of sport.

10. We must continually emphasize the fact that most of our physical education courses are "content" courses and not merely additional professional education courses. If this is clearly explained and indicated there will be less objection to an enriched professional specialized education section in the five-year program. It will then be our responsibility to see that this part of the program is characterized by real depth and scholarship.

I believe, then, that in spite of some recent sentiment to the contrary, there is ample evidence to support the recommendations for a systematic five-year continuous program of professional preparation in physical education. I believe teachers prepared in such programs will have more opportunity to explore meanings and relationships, to obtain sound basic scientific information, to become skilled in activities, to learn the techniques which help make the master teacher, and to realize the possibilities and challenges present in our profession.

basic instruction

EXCELLENCE IN TEACHING IN THE BASIC INSTRUCTION PROGRAM

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The proposed theme for this conference was "Physical Education as an Academic Discipline." Although criteria for an academic discipline vary, let me suggest two approaches. The first is that an academic discipline possesses a body of specialized knowledge available to the members of the profession and can and does contribute to the general objectives of education. Certainly we in physical education meet these conditions equally with the other subject matter areas of education.

The second approach is that, at the college level, an academic discipline has four basic responsibilities: (a) rendering technical service; (b) carrying on research; (c) engaging in scholarly pursuits, such as criticizing and interpreting its field of specialization; and (d) rendering public service.

These are challenging criteria for an academic discipline. We can always seek to improve ourselves in all of the four criteria. Our needs in (b) research, and (c) scholarly pursuits, were ably discussed by Seward Staley in his President's Address to the 1956 Convention. For my presentation today, I should like to discuss our needs related to the first criteria—rendering technical services in our specialty of physical education. This is our unique contribution to higher education. Striving for excellence in rendering our services is certain to form one of the major challenges of our time.

Further justification for selecting this approach comes from Benjamin Massey's address to this section in 1962, entitled "Research and the Basic Instruction Program." He posed the question, "Which of the problem areas relative to the basic instruction program are in the most critical need of research?" He suggested four problem areas, one being: How effective are our teaching methods?

If we are to meet the obligations of the basic instruction program, we must give serious consideration to the excellence of our teaching. If we are concerned with raising the status of physical education and its acceptance by other faculties, excellence in teaching is of the greatest importance.

Process in Teaching

How should we proceed toward a goal of teaching excellence? First, perhaps, it is necessary to identify the factors essential to good teaching. The qualities of a good teacher as to personality and background are familiar to all of us. However, Robert Bills, chairman of the Department of Psychology at Auburn University, has presented a different and intriguing new concept. He believes that people can be described on a continuum from "stasis" (standing still or at best running in place) to "process" (changing as situations demand through interaction with others). This process person is knowledgeable. He is also a personally well-developed individual.

Dr. Bills further believes that the hope for the future of society and, therefore, the goal of education is the development of process people. There is support for this thesis when you realize the impossibility, in today's changing world, of predicting what knowledges and skills will be needed in the future. Curriculums to meet future needs are nearing their limits for expansion. The future citizen must be able to meet and solve problems we can neither foresee nor predict. Whether he succeeds in solving his problems will depend not only on what he knows but also on his ability to recognize problems and change to meet the new situation. Dr. Bills believes personal qualities can be developed in students who, with a breadth of experience as a base, are growing, maturing, developing, and changing and are able to go beyond the point to which we can take them. Such persons he calls process persons. Teachers with these qualities are process teachers.

CHARACTERISTICS OF THE PROCESS TEACHER

Characteristics of the process teacher, according to Dr. Bills are: (a) A high level of empathic understanding, that is, the ability of the teacher to understand the student as the student understands himself. (b) A high level of regard for the worth of the student. (c) Unconditionality of regard; that is, there are no conditions placed on this regard, which in effect would say: "I will accept you only if you learn, or try, or if you behave, etc." (d) Congruence on the part of the teacher; that is, what the teacher does is consistent with what he thinks and feels.

MEASURING PROCESS

A Q-sort technique of 84 pressing problems of teachers was used to develop a measure of process. The respondent was directed to place the 84 problems into 11 categories or piles of 1, 2, 6, 11, 14, 16, 11, 6, 2, 1 each. That is, place the problem which is most pressing in pile one; his next two most pressing problems in pile two; the next six most pressing problems in pile three, etc. The problems had previously been rated by judges as to their positive-negative qualities, their central-peripheral qualities, and their past-future qualities. The sorting of the eighty-four problems formed the basis for a quantitative measure of process. With this instrument, studies were conducted with interesting results.

STUDIES CONCERNING PROCESS

When principals and superintendents of two schools rated their teachers, the effectiveness of the teacher was significantly related to their process or stasis qualities as revealed by the problems Q-sort.

At the elementary level, children were selected in grades 3 through 6. At each grade a teacher was selected who was more in process and one who was less in process. Following this the attitudes of their children were measured toward self and other people. The results were that the more process the teacher the more positive were the attitudes toward self and others which their children held.

In a high school group, pairs of process and less process teachers were selected and their students given a relationship inventory to describe the way they believed their teachers saw them. In other words, the students described the congruence of their teachers, the conditionality of their regard, the positiveness of their regard, and the degree of empathic understanding of the teacher. It was found that on all of the variables, process teachers rated above teachers who were less in process.

At the college level, Emmerling at Auburn measured the process-stasis qualities of 110 teachers, administrators, and supervisors. From this group he selected ten teachers who were more in process and ten who were less in process. He then selected a sample of 30 students from each of these 20 teachers. He visited their schools and had their students describe their perceived relationship with these teachers and the student-centeredness or teacher-centeredness of their methods of instruction. With levels of probability of less than 1/1,000, students described their process teachers as more empathic, more positive in their regard, less conditional in their regard, and more congruent in the relationship. Process teachers were described as far more student-centered in their instruction.

PROCESS IN PHYSICAL EDUCATION

Adapting the results of these studies to basic instruction in physical education, we can see that we, too, need to develop in students the abilities and attitudes of the process person so that regardless of their future problems in health and fitness they will make the changes that are necessary. Our teachers—yes, we ourselves need to take an inward look. Do we really see the activities, the problems, and the challenges as our students see them? Do we accept all of our students regardless of skill level, personality, or status? Do we act and think as we feel?

In the studies at Auburn University, effective teaching was not related to method of teaching, nor was it related to subject matter area. I feel certain that effective teaching in physical education also requires these elusive yet vital qualities of process. The difference between a good teacher and an excellent teacher might well be this matter of process.

Research and the Improvement of Teaching

"Process" is primarily a relationship between the teacher and the students. However, a process person is knowledgable and does possess skills. Thus, along with this relationship, we as teachers must plan learning experiences which ultimately result in the attainment of our teaching objectives. Process alone is not enough. The second step, then, in our progress toward excellence in teaching is the actual improvement of our teaching.

Probably most of us are guilty of not keeping up with current research literature as closely as we should like. Dr. Massey, in his previously mentioned 1962 address, observed that much of the material now lying dormant would answer many of the current pressing questions on the basic instruction program. This is undoubtedly true. I suggest that a second difference between good teaching and excellence in teaching is the degree to which results of current research are utilized.

Role of Practice in Motor Learning

A brief review of current research in physical education reveals developments in several areas related to improved teaching. One such area is the role of mental practice in the learning of a motor skill. All the studies reviewed indicated benefits for mental practice although these were not always as beneficial as actual physical practice. Vandall, using the target throw and free throw shooting as skills, found mental practice as effective as actual practice. Halverson found that mental practice combined with instruction which placed emphasis on kinesthetic memory improved actual performance on the one hand push shot in basketball. Twining found significant improvement from both physical and mental practice on the ring toss. Steel found highly significant gains in target throwing by both actual practice and mental practice groups. Waterland compared two teaching methods and concluded that imaginary bowling movements prior to bowling improved actual bowling performance. Clark, using three groups of varying ability levels, concluded that mental practice and physical practice groups both increased significantly on the one hand foul shot. Start used British children as subjects and found significant improvement in the underarm free throw in basketball due to mental practice. He also found the improvement was not related to initial scores nor to intelligence. Wilson used control, physical practice, and mental practice groups and concluded the form of practice produced no significant differences in forehand and backhand tennis drive performances. Kelsey concluded that mental practice significantly increased the muscular endurance of the abdominal and thigh flexor muscles. The increase, however, was significantly smaller than that achieved by actual practice on sit-ups.

The appropriate use of mental practice and the balance between mental practice and physical practice in various learning situations is far from settled. It seems apparent, however, that our teaching procedures should involve an awareness of the part played by the mental process.

COMPARISONS OF TEACHING METHODS

A second problem area related to improved teaching is the always present problem of teaching method. Dailey and others concluded that the use of a commercial bowling aid with beginning bowlers failed to bring about better bowling performances. Watkins, using varsity college baseball players as subjects, concluded that players who received batting instruction plus viewing motion pictures of their batting significantly decreased the number of batting faults. Mohr and Barrett found that when college girls were taught to understand and apply mechanical principles to performance of certain swimming traits, greater improvement was made than when such instruction was not given. However, Cobane, also with college women as subjects, found that understanding of selected principles of movement was no more effective than the traditional method in the acquisition of tennis skills. Also, Colville, using college men as subjects and ball rolling, ball catching, and archery as activities, concluded there was no evidence that instruction as to principles involved facilitated learning or that such knowledge facilitated performance on a similar or more complicated skill to which the same principles applied. Mathews and McDaniel experimented with the use of a Golf-Lite to visually trace the path of the golf swing and concluded that use of the Golf-Lite was beneficial to most of the students who used it. Egstrom and others concluded that practice with a light ball was as effective as practice with a heavier ball in developing skill to throw the heavier ball. Practice with a heavier ball to throw a light ball, however, was not as effective. Hall used beginning college bowlers separated as to motor ability and found no significant differences between the whole and part methods of instruction regardless of high or low motor ability scores. Wireman, experimenting with ways to develop physical fitness, found that knowledge of test results was most effective in increasing physical fitness scores. Method (sports and games or calisthenics) was not as important. Casady concluded that presentation of lectures on physical education in a college service program was related to increased physical efficiency on the part of the participant but not to changes in attitude toward physical education.

Results of any research must be tempered by an evaluation of the experimental design, sampling procedures, and data collecting instruments. However, even a cursory review such as this should cause us to ask questions and possibly reevaluate our own teaching methods.

MOTOR LEARNING

A third problem area related to improved teaching is the area of motor learning in general. A condensation of a symposium presented at the Western Society of Physical Education for College Women appeared in the May 1960, issue of *The Physical Educator.* This is an excellent series of points of view by some of our outstanding college women teachers. Treatment of low skilled students and the motor learning of high skilled students were among the topics discussed. The basic instruction program can never rise to excellence until recognition is given to the problems related to differences in the abilities of students. The question first is: "Do we know how skilled and unskilled students differ and the approach to their instruction?" and, secondly: "Do we put into practice what we know?"

Two other articles which sharpen one's appreciation of motor learning were found. The first was Warren Johnson's articles on "Motor Learning and Golf" in the May 1961, issue of *The Physical Educator,* in which he presents and discusses some factors which affect the efficiency of motor learning. (The factors considered were: age, incentive, distribution of practice, aspiration level, and emotion.) The second was Chet Murphy's article in the February 1962 *Journal of Health, Physical Education, Recreation,* "Principles of Learning with Implications for Teaching Tennis." He reviewed the basic principles underlying the teaching of motor skills.

The point I am trying to make is that we have opportunities to keep informed and to self-evaluate, by systematically keeping up with our literature. This, too, is one of the differences between good teaching and excellence in teaching.

A Climate for Excellence in Teaching

A third aspect of excellence in teaching in the basic instruction program is the climate surrounding the service program. The administration and the faculty of colleges or departments of physical education can, through their attitudes and actions, promote excellence in teaching. In addition to an awareness (and insistence) that excellence in teaching is important, specific actions should be formulated in two areas: (a) Orienting new faculty to the basic instruction program, and (b) institutional policies and practices relating to instruction.

ORIENTING NEW FACULTY

Concerning the orientation of new faculty to the basic instruction program, many of our institutions of higher education use graduate assistants as instructors in the service program. Those who do not often have a large turnover in faculty from year to year. In both instances the new teacher is also quite likely to be a beginning teacher. There is need for inservice growth if teaching is to proceed from good to excellent. I know personally of institutions which help, guide, motivate, and educate the first year instructor as he teaches in the basic instruction program. This is laudable. It is difficult to imagine excellence in teaching by the inexperienced instructor without a definite program of inservice growth and supervision.

INSTITUTIONAL POLICIES AND PRACTICES

As to the second aspect of a healthy climate, institutional policies and practices also affect the quality of teaching more than is commonly realized. Teaching is a personal experience, greatly influenced by what the teacher knows is expected of him and by whether or not anyone knows how well he teaches. This means the institution should have a planned program of interest in basic instruction program. One suggestion is that teaching in the basic instruction program be evaluated. The form of evaluation (by administrator, teachers, or students) is not as important as that it be done. The purpose of the evaluation should primarily be for the improvement of instruction. Research shows us that evaluations to determine rank or salary are often invalid, but evaluations simply to improve instruction are of great value.

Closely associated with the evaluation of teaching is the policy of the department or college for recognizing excellent teaching. All too often excellence in teaching in the basic instruction program or teaching in general is meaningless as far as rank, salary, or recognition is concerned. This is especially true in the service program since it so often is relegated to a position far below the teacher preparation program. A strong faculty in physical education must include many talents. Our institutional policies and practices should be such that talents in all important areas can be recognized. Certainly excellence in teaching is a talent worth keeping and rewarding.

I have briefly touched upon three aspects of excellence in teaching in the basic instruction program: the importance of a process quality in teachers, the need for systematic review of current professional literature, and the responsibility of the administration and faculty for setting a climate for excellence. My intention has been to focus attention on excellence in teaching as opposed to merely good teaching. To rephrase an old saying—What is average, but the best of the poorest and the poorest of the best? The basic instruction program deserves more than average teaching.

THE STRESS CONCEPT IN PHYSICAL EDUCATION[1]

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The interdependence of mind and body is so complete that they can be separated only artificially. When an individual is angry or frightened, a number of physiological changes take place in his body. If he has a headache, his emotional outlook will be altered. While the effect of an individual's psychic state on his body has been studied widely, the opposite, but equally important relationship—the effect of his physical condition on his mental health—has received less attention. This paper probes some of the imbalances and stresses of modern life and their implications for physical education.

Biological Nature of Man

REACTIONS TO STRESS

The body is endowed with numerous devices for maintaining stability. Adaptive mechanisms protect the individual against injury, alter the rate of vital processes, and regulate the conservation and release of vital material supplies. According to Cannon, this is accomplished with a considerable margin of safety, the normal person possessing an available reserve to meet emergencies and to maintain what he terms homeostasis:

> Bodily homeostasis . . . results in liberating those functions of the nervous system that adapt the organism to new situations, from the necessity of paying routine attention to the management of the details of bare existence. Without homeostatic devices, we should be in constant danger of disaster, unless we are always alert to correct voluntarily what normally is corrected automatically.

This homeostatic quality of the body frees the individual to enter into satisfying relationships with his fellow men and to explore the creative challenges of the world around him.

Cannon's research indicates the role of the autonomic nervous system in maintaining a balance between expenditure and restoration of energy. He notes that in time of stress, adrenalin is secreted by the adrenal medulla, which cooperates with the sympathetic nerve impulses in releasing carbohydrates from the liver and flooding the blood with sugar. In addition, digestive activity is inhibited and blood is taken away from the inhibited areas to be distributed to the heart, lungs, limbs, and central nervous system. Muscular fatigue is postponed, and the blood coagulates more quickly. Cannon states that this process operates much as a reflex action, and is stimulated by the emotions of fear and rage, and reaction to pain. These emotions are, therefore, of direct benefit in meeting emergencies which require strenuous effort, and the adrenalin released into the blood stimulates an increase in red blood corpuscles, and speeds the heart beat, both of which help to rid the body of carbon dioxide and supply it with more oxygen. The smooth muscle of the lung may be relaxed by the discharged adrenalin, and exertion itself further stimulates the changes initiated by emotional excitement. Cannon suggests that this may explain the relief in breathing known as the "second wind."

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[1] Bibliography may be obtained from author.

Cannon's observations are confirmed psychologically by the "sense of power" which frequently accompanies emotional excitement. He concludes that the two processes of the body—conservation and expenditure—are the underlying bases for emotional states.

Selye, possibly more than any other investigator, has clarified the concept of stress. He defines stress as a "state manifested by a specific syndrome which consists of all the unspecifically induced changes within a biological system." Stress, therefore, may be caused by many different "stressors," but manifests itself in a characteristic form.

The response of the body to general stress consists of three stages: an alarm reaction, a stage of resistance, and a stage of exhaustion. Selye terms this phenomenon the general adaptation syndrome (GAS) and notes that under conditions of very severe stress the state of exhaustion may lead to death. He says, however, that "Most physical or mental exertions, infections, and other stressors which act upon us produce changes corresponding only to the first and second stages; at first they may upset and alarm us, but we get used to them." All individuals experience the first two stages of the GAS many times in adapting to the various stresses of living. In addition, exhaustion is ordinarily reversible.

In tissues directly affected by a stressor, a local adaptation syndrome (LAS) develops, such as inflammation after the entrance of microbes into the body, or exhaustion of the muscles. When several of these specific reactions operate simultaneously, they can activate the GAS mechanism. When local stress exhausts the reserves of a particular part of the body, activity automatically ceases in that area. During this period of rest, adaptive energy may be obtained from less accessible local stores, or from other parts of the body.

Chemical alarm signals are released by stressed areas to the principal coordination centers, the nervous system, and the endocrine glands, especially the pituitary and adrenal glands. The latter produce adaptive hormones, helping to resist wear and tear in the body. In both the nervous and endocrine systems, there are antagonistic functions, to fight, and to relax or retreat. Selye notes that nerves actually act through hormones. Nerve endings discharge hormone-like substances which act upon tissues, causing muscles to contract. In addition, nerves produce adrenalines, which are identical to that produced in the adrenal medulla. The hormones secreted by the adrenal medulla produce a uniform effect throughout the body, while the nerve hormones are more useful in focusing changes in a particular area of the body.

According to Selye, the adrenal cortex is a major organ of homeostasis. It produces two types of vital hormones, the pro-inflammatory and the anti-inflammatory corticoids. Selye points out that the hormones are grouped in this manner only for the sake of simplicity. In actions other than their effect on inflammation, the two types are not necessarily antagonistic.

The pituitary gland, by discharging its adrenocorticotrophic hormone (ACTH), informs the adrenal that local stress exists, which primarily induces the adrenals to produce anti-inflammatory corticoids. Some investigators believe that the somatotrophic hormone (STH) of the pituitary stimulates pro-inflammatory corticoids. In any case, there is a mechanism which balances the production of the two types of corticoids. The response most useful depends on the nature of the situation.

The adaptive reactions to stress involve many other factors which are not discussed here. The liver, the kidneys, and white blood cells, for example, also play important roles.

Reaction to stress may be modified by numerous factors, such as emotional reactions (which produce general stress themselves), diet, heredity, and exercise. Selye has also shown that when the stress response fails to deal adequately with a stressful or disease-producing situation, the body may develop "diseases of adaptation."

In a recent article, Selye outlines some psychiatric implications of stress research. It is well known that tuberculosis and other infectious diseases are intensified by a severe stressor. Rest cures protect the individual from stress and aid healing. Otherwise, the anti-inflammatory hormones produced by stress favor the spread of the infection. He also notes that the relation between neurogenic stress and peptic ulcers may be the result of adaptive hormones diminishing the protective resistance of the walls of the duodenum and favoring the secretion of aggressive enzymes. Finally, he explains, during stress the pituitary tends to emphasize secretion of ACTH, while neglecting production of gonadotrophic hormones. As a result, prolonged emotional or physical stress causes a "stress shift" in the pituitary, which may result in impotence. When this happens, a vicious cycle of worry and further stress aggravates the condition.

Trends in Technological Society

AUTOMATION AND THE CONSEQUENCES OF SEDENTARY LIVING

The rapid changes brought about by advances in engineering, chemistry, and other sciences are an expression of man's capacity to deal with his environment. Through mechanization, production of food and goods is constantly being increased, further freeing man from the drudgery of a long work day and giving him time for other pursuits. Medical science has lengthened the life span and living is made less strenuous by numerous gadgets which replace manual work. Not only has the automobile largely replaced walking, but the effort required to drive a car diminishes with the debut of each year's new models. All these developments, at least on the surface, make life easier.

Lack of exercise, however, takes its toll on the emotional health of man. If a situation in which threat is perceived does not permit or require reasonably strenuous muscular activity, mobilization of the body resources is inappropriate and creates disharmony. The individual remains keyed up with literally no place to go. Morehouse writes, "Without metabolic demand, the response is purely an emotional one and organic changes become side-reactions. These side-reactions persist for hours and days and feed back to affect the function of the central nervous system." Empirical verification of this process is found in a study by Freeman and Pathman. They demonstrated that individuals who tend to recover their internal equilibrium most rapidly after emotional arousal are those who readily discharge excitation through overt muscular action. Physical distress often can be a kind of body language, expressing emotional tensions which have been repressed, rather than released overtly.

THE POSSIBLE ROLE OF EXERCISE IN ADAPTATION OF PSYCHOLOGICAL STRESS

Clifford Brownell observes that man is a biological organism and must live within the realm of biological laws. This places certain limits on his adaptability. Brownell further notes that as a biological creature man has changed little in the last 50,000 years.

In a similar vein, Morehouse explains that the therapeutic effects of physical exercise may be due to the effect of "primitive" stresses aiding in the adjustment to modern living. He states, "Perhaps the mobilization of the body forces to meet metabolic, circulatory, nutritional, and neuromuscular demands of exercise supervenes in such a way as to reorganize the reflex mechanisms and restore harmony of function." The implication is that a primitive stress, exercise, relieves a modern stress, emotional tension.

Michael proposes a similar hypothesis. He reviews a number of research studies which indicate that regular exercise affects the adrenal glands and autonomic nervous system so as to condition the stress adaptation mechanism. Frequent exercise may increase adrenal sensitivity, which results in a quicker response to stress, and it enlarges the adrenals, which suggests a higher adreno-cortical reserve. Regular physical activity may, therefore, result in an improved response to stress.

Persky notes that a difference exists between the physiological reactions to physical exertion and to emotional stress. He explains that blood eosinophil and gluthatione levels are significantly lowered by psychological stress, whereas, severe physical activity produces no such change. Michael concludes, ". . . exercise can affect the adaptive mechanism without itself increasing the reaction caused by emotion. The advantage of exercise lies in the fact that it stimulates the defense mechanism, not that it is similar to other stresses."

Despite these encouraging possibilities, our understanding of the role of exercise as an aid in physiological adaptation to emotional stress is incomplete. The response of any individual to stress is affected by inheritance and by experience. In addition, the organism responds as a unit, making it difficult to isolate physical from emotional factors. Bannister cautions that stress occurring in athletic competition may not be comparable to the types of stress studied by Selye. The role of exercise in adaptation to stress may be distorted by emotional factors in a competitive situation. It seems that further study of the effects of exercise on the stress adaptation mechanism in situations which do not involve a strong counterpart of emotional anxiety, might prove fruitful.

Balancing Work with Play

LEARNING TO RELAX

The proper balance of rest and activity is vital in maintaining physical and emotional health. Civilized man, all too frequently, attempts to restore balance through the use of sedatives or other drugs, or through excessive indulgence in alcohol, food, or smoking. This is unfortunate, since for an otherwise healthy person who suffers from nervous strain, exercise is a normal solution. Paul Dudley White, the noted heart specialist, states, ". . . exercise sufficient to cause muscular fatigue is the best antidote I know for nervous strain and insomnia. It can helpfully replace most of the tranquilizers and sedatives of today."

FINDING HARMONY BETWEEN WORK AND PLAY

Lack of balance between physical and mental activity has been emphasized as a disintegrating force, but actually the problem may stem from a more basic psychological attitude. Man must work to live, but for some individuals work becomes an obsession. Waterman notes that many people become mentally ill because of "overwork." He points out that the problem actually stems from an inability to integrate work with play.

The implications for physical education are clear. Emphasis must be placed on the need for a balance of work and play, and of mental and physical activity. The person who is engaged in intense mental work benefits particularly from physical recreation, and he must be helped to see the need for regular exercise. The college student, who received more formal education than his fellows, and who in all likelihood will be engaged in a predominantly mental occupation, is certainly in a position to benefit from physical education. This problem is concisely summarized by Paul Dudley White:

> The soma has an important effect on the psyche just as the psyche has on the soma. There is no sense in highly educating the mind of a man who may be a brilliant contributor until his sudden death at 38 or 40 or his crippling at some other age in middle life. It is not only uneconomical but it is a grave mistake. Let us, therefore, while working for the fitness of our minds and souls, not neglect the fitness of our bodies.

Epilogue

Stress is inherently a subject of interdisciplinary study. And like other concepts based on organismic theory it holds many subtle implications for physical education, the only area of the curriculum solely devoted to physical well-being and efficient movement—casualties of automated living. As a unifying concept it gives meaning to many divergent phenomena which otherwise seem unrelated.

The terms anger, aggression, and hostility ordinarily carry negative connotations in American culture. As a result society places a special taboo on expression of these feelings, and an individual who does express them may suffer disorganizing feelings of guilt. Thus, there is a tendency to repress hostility, and as noted previously, where no channels exist for the expression of strong emotions, mental and physical ill health may result. On the other hand, if they are released without direction, these emotions can cause a great deal of suffering.

Menninger acknowledges the importance of socially accepted outlets for aggressive energy. He states, "It is certainly more desirable for a man to punch a punching bag or walk miles in pursuit of a golf ball than to exert the same energy in attacking the reputation of his neighbor, the peace of mind of his wife, or the function of his own heart."

Some psychologists point out that if there is a deep disturbance, mere release will only bring temporary relief, while the basic condition of hostility remains. Even temporary relief, however, has value and gives the individual an opportunity for integration while he is not absorbed in his hostile feelings.

It is also important to note that under conditions where strong self-strivings exist, other aspects of the individual's personality may take on greater significance and the need for hostile expression may be superseded. Allport states, "I am suggesting that under certain circumstances—especially when comprehensive propriate [self] motives hold sway—the incompatible impulses are not normally repressed; they simply evaporate."

The ability to accept some emotional stress as a normal experience is emphasized as an important character trait of the creative individual. May emphasizes the role of heightened awareness in the creative act which he terms an intense encounter of the individual with his world. The individual responds physiologically to this intense encounter, much in the way that Cannon describes in the flight and fight response, but the effect is joy, not fear. Joy, in this case, is associated with heightened consciousness, and actualization of potentialities. May's description is similar to a phenomenon frequently observed by physical educators on the athletic field. Apparently, where self-involvement is great, the tensions and stresses which would discourage or block the less involved individual are minor discomforts in achieving the goal.

Satisfying physical activity has an obvious role in dealing with modern problems of stress. Physical education which is based on understanding of body dynamics and body awareness is equally important. Although the human organism has great capacity for adaptation to stress, when adaptation exceeds reasonable limits, it takes its toll.

This is illustrated by the relationship of posture and body mechanics to vision and visual perception, particularly in early development. Since the maturation of large muscle abilities and distant-point vision precedes that of fine muscle capacities and near-point vision, the child needs ample opportunity for experiences which permit normal development. When use of near-point vision and fine muscle abilities is required premateurely, adaptive difficulties arise. Research in the Polk County, Florida, schools indicates that a first grade curriculum giving greater emphasis to physical activities such as rhythmic training and body balancing helps to prepare children for formal learning.

As noted previously, in periods of emotional stress widespread physiological changes occur in the body. When periods of stress become chronic, they may be reflected in terms of body language, e.g., excessive tenseness, shallow breathing, stiff joints, and other disturbances. One school called Physical Re-education, founded by Elsa Gindler in Germany, utilizes interesting and unorthodox techniques in dealing with these problems. Speads, one exponent of the school in this country, explains:

> Physical Re-education is the training of the conscious sensing of the body and its functioning. We *are able* to sense the body because we have a special sense for that purpose. And because we have this special sense, which we call "body sense" or "organ sense" or "muscle sense" or whatever you wish to describe it, we are able to feel the body condition. This special sense, though innate in all of us, is largely ignored and unused by most of us. Physical Re-education, by training this special sense, teaches the individual how to experience and analyze the habits of use and the functioning of his body in motion and at rest. It teaches the experiencing of the proper functioning of the body when poor habits do not interfere. It attempts to bring about basic functional modifications not by outside means but by feeling what the condition is and how it can be dissolved.

The concepts of movement of the late Rudolph Laban have found application in many areas, including physical education. Laban spent many of his later years in industrial research. Lamb states that Laban was sensitive to the effects of modern industry on workers and hoped to help them counter the tensions of the working day by analyzing the movement problems involved in each job. Laban showed that there is a natural working rhythm in each individual which had gone unnoticed, and the individual's movement pattern was made a factor in placement.

Meredith-Jones, who worked closely with Laban in England, observes two major contributions of his work. First, Laban presented and analyzed the universal motion factors of "strength," "time," "space," and "flow." He demonstrated the relationships of these factors to each other and to space harmony. Second, Laban recognized the individuality in people expressed through patterns of movement as well as through physical appearance, structure, and intelligence. His aim was to help the individual to explore the complete range of movement and to discover the particular motion factors with which he felt most comfortable. Laban's conviction was that movement is a life process through which man can discover himself and develop his unique potentialities. If we accept the premise that under modern conditions of living man's natural range of movement is constricted, we can understand the growing application of movement in therapy directed at the relief and reduction of stress.

It is apparent that the implications of the stress concept open many horizons for study and research in physical education. In man's march of progress he has unwittingly created disharmonies in his life. It is our task to help him rediscover an essential lesson of modern science—that the mind and body are one. Neglect of one or the other can result only in an incomplete human being.

"OF"

J. T. POWERS
Baylor University

According to Webster, the term academic is applied to that which relates to the school. According to the concept of modern education, the school is that center of formal education which has been developed for the purpose of making its contribution to the preparation of our people, usually during the early years of their lives, for the most effective citizenship possible. Therefore any area of learning and resulting development contributing to this end which is administered by the school would constitute a form of academic discipline.

It is obvious that school programs cannot provide all areas and degrees of life preparedness needed by each person. What, then, are the criteria for determining whether or not a given area should become or remain a phase of the academic effort? First of all, of course, it must be that which contributes its factor to human enhancement, in terms of preparation, for a more effective life in our society. It must contribute to the realization of the aim of education. Secondly, it ought to make a contribution which is not already being made by another academic area to a phase of preparation which is not already being accomplished by the home, the church, or any of the other institutions or programs designed to promote human effectiveness. Failing in this uniqueness of content, it must have uniqueness of approach and method to the extent that it is able to duplicate the contribution of another area in a manner which results in more effective preparation than that which was being made. In addition to its academic uniqueness, the educational concomitants of an area must be such that they supplement the contributions of other academic disciplines and are in keeping with the overall objectives of human development. Only in these ways can a program justify a place in the school curriculum and classification as an academic discipline.

How does physical education qualify as an academic discipline? What are the educational claims for physical education and to what extent is it unique in its accomplishment of each? Generally speaking, physical education claims, more or less, major contributions in the areas of physical, mental, social, moral, and emotional development. Why does one program claim the ability for almost total development and what is the validity of each claim?

During its early years as a school program, physical education, because of its newness and because of the unusual nature of its educational efforts, did not enjoy the acceptance by educators of the day enjoyed by other areas. In an effort to gain some measure of academic respectability, its people may have begun to look about them in an effort to define those qualities which seemed to render other programs more educationally acceptable than theirs. In so doing they perhaps discovered that many laid claim to extensive intellectual development which was considered exceedingly appropriate. Social competence, emotional stability, and strong moral fiber were also found to be highly desirable human qualities resulting in part from the efforts of "respectable" educational programs. Evaluation of the experiences provided by physical education led to the discovery that in some ways it, too, contributed to the development of these same important qualities and could therefore lay rightful claim to the same educational status enjoyed by all other school programs.

As emphasis on these new avenues of education through physical education began to mount, the program which had once been primarily an education *of* the physical now came to refer to itself as an education *through* the physical. Since it had found increased recognition through its new dimensions, such a characterization served to remind all that it was a program which offered much more than physical enhancement, and one which served to emphasize those offerings which were not basically physical. The broader emphasis was good and would have been beneficial to physical education had it not grown to such proportions that the *through* seemed often to deny the *of*.

It is not to be argued that participation in and education through physical education requires a considerable amount of mental activity. The acquisition of knowledge as well as accurate manipulation of that knowledge, sometimes under great stress, serves the cause of intellectual development. Except as it relates specifically to physical effectiveness, however, the mental development acquired through physical education is small in comparison to that provided by other areas of the school program, and probably is not significant in terms of the ultimate intellectual effectiveness of the individual.

Any time two or more people are associated, some kind of social development will be effected. Certainly physical education, with its opportunities to associate with others both in informal recreational and highly formal situations, provides the possibility for worthwhile social growth. It is not necessarily true, however, that any one such experience is of greater worth socially, or indeed is more significant, than a coffee session, a campus date, a school party, a formal debate, a session with a laboratory partner, or one of many other experiences provided by other phases of the school program. In short, the physical education experiences of an individual, or the lack of them, generally will not necessarily have a measurable effect on his level of social acceptability.

Physical education, through its many competitive sport programs, encourages appreciation of adherence to rules, respect for officials, honesty and integrity of participation, and the development of a sense of responsibility to others—all of which are the highest type of moral qualities. If it is sometimes true that an improperly placed emphasis in athletics leads to moral deterioration, it is also true that the overall program should not be considered worthless because of a weakness, the equivalent of which could be found in most other programs. With full recognition of the contributions to moral strength made through physical education activities, they cannot be said to be of any greater value than those efforts at moral development which permeate the American educational program. Certainly they are not nearly as great as those received by many from the home and the church. Surely it could be said that the moral strength of an individual would seldom be dependent upon his physical education background.

When an individual is faced with the necessity of reacting effectively under great emotional stress, as is often the case in competitive athletics, he will usually increase his level of emotional stability, provided he was originally sufficiently stable to profit from the experience. If he was not, increased instability may result. Assuming that the individual is usually guided through physical activities commensurate with his level of emotional stability, then acceptable emotional development does result from many of these experiences. The whole process of formal education, however, is also filled with stress situations relative to which the individual must function efficiently and from which he has perhaps more opportunities to develop emotionally.

That physical education contributes to the mental, social, moral, and emotional development of the individual is evident, but that it is in no way unique in these areas is also evident. What then is the basis for its contention that it is worthy of consideration as an academic discipline? The answer is simple. Physical education may be considered an academic discipline, and may justify its inclusion as a program of formal education, to the extent to which it succeeds in the development *of* the physical for a more effective life. A leading educator was once heard to say, "If you people in physical education would spend more time doing that which you do well and less time claiming that which you do only in a small way, you would contribute greatly to education." The things which we do well, the things which we do better than any other program in existence, the things for which we are unique, are our contributions to all the areas of physical development necessary to effective human life.

This is enough. It is not necessary that we go looking for other ways to justify our existence. In a Christian society many of us recognize an omniscient, omnipotent God as the Creator of man, and we accept the terms of the creation. Man was gifted with certain potential for development in each of the various human areas and was charged with the responsibility for achieving this development so that he might be the most worthwhile creation possible. It was the design of the Creator that man have form, a design which resulted in the intentional and purposeful creation of the human body, housing, and tools. In this area, as in the others, man was given the possibility and responsibility for development. It is for the purpose of helping him to meet his developmental responsibilities that man has devised an educational system. Within this system, we in physical education have the sole opportunity and responsibility for helping man to meet his responsibility for physical effectiveness. In this way we are educationally unique—need we be more?

Physical education is truly an academic discipline. It is a worthwhile and essential educational program. Its concomitants in the areas of mental, social, emotional, and moral development supplement these efforts in other disciplines and are very much in keeping with the purposes of education. Its primary effort, the development *of* the physical, renders it unique and necessary to total educational accomplishment. Physical education is indeed education *through* the physical, but let us keep the characterization in proper perspective. Let us not allow the emphasis on *through* to deny or obliterate the *of*.

THE PHYSIOLOGICAL APPROACH TO THE BASIC PROGRAM

FRANK BEARDEN
Rice University

Our profession of health education, physical education, and recreation has been, in comparison to most of the other university disciplines, recognized only recently as an accepted course of study on most campuses. American colleges and universities are today, as they have been for years, evaluating their place in the structure of American life. The debate is constantly before us as to the responsibility of meeting the dual role of the continuous need for broadening the individual while at the same time preparing him professionally for useful service to mankind.

While medical universities tell us to send them a student with a broad background of experience, invariably the student with the concentrated biology transcript is being given preference. Are we in a vicious cycle? Are we caught up in the highly specialized world at the undergraduate level? When one public school near Chicago gave entrance examinations for admittance to kindergarten, the public objected. The test-minded educators had gone a bit too far. I am anxiously awaiting the day when we will realize that college boards and similar examinations test only one thing—that the student can score high on a test.

Some of the experiences within a university are designed to impart knowledge, some emphasize its use and interpretation, while others deal more with the life of the student himself. In this paper we will think of physical education not only in regard to the latter, but also in relation to the other two.

The AAHPER project on "A Body of Knowledge" for our field seems to be a step in the right direction. Admittedly we do not function in every respect as do other university disciplines. We are nonetheless academic. There should be nothing in any definition of our profession which would categorize a modern physical education program as nonacademic. The laboratories, play fields, gymnasiums, and pools are not laboratories where bridges are planned or formulas tested. They are laboratories where changes in human personality take place, where human resources are cultivated. The historian Henry S. Commager says that "much of education takes place in the association of students." If this is true, then a well-planned program of physical education can offer this opportunity. This, then, is why we should educate through the physical and not of the physical.

Most of us have taught our classes for years with a thorough knowledge of the physiological principles on which we base our curriculum. My purpose is to show the need for teaching the students these same basic physiological principles—in other words, applied physiology.

Ben W. Miller, president of the AAHPER, stated at the recent Texas state meeting that not within the next one hundred years will we be able to justify a physical education program on the basis of activities alone. Here again is an implication of the need for placing a body of knowledge into our programs.

Mary Dabney, chairman of the Women's Health and Physical Education Department at Texas Technological College, stated in a letter to the president of her institution that "the philosophy of physical education is based on the premise and the scientific truth that the human organism functions as a unitary whole. We cannot divide the human being into parts—physical, mental, and social and train or educate each part separately. Therefore, we cannot ignore that while a technical skill is being learned, additional social, mental, and emotional learnings are taking place. There is no such single thing as *physical* fitness. The physical education program is striving for *total* fitness for all college students. Therefore, it is impossible to limit our program to training of the physical through emphasis on such activities as calisthenics or gymnastics. Total fitness is acquired only through a variety of activities—natural activities—which man has used from the beginning of his history. Our program in physical education is simply an elaboration of those basic movements which have enabled man to survive on earth and enjoy life."

Sixth grade elementary school students were recently asked to find their pulse on their wrist and record the rate for a period of one minute. They were then asked to stand beside their desks and jump up and down for one minute, sit down, and count the pulse a second time. This elementary experiment was used as a basis for a talk to these students on cardiovascular functions. The interest and inquisitiveness of the class was surprising and gratifying. Why not add basic experiments on physiological functions that would be appropriate for the college student?

Freshmen male college students were recently used in an experiment to compare the Harvard step test on pulse rate recovery with comparable work done on a motor-driven treadmill running at the rate of 5 mph with a 20° incline. Even though the experiment was elementary, the enthusiasm and interest of the participants was beyond expectation. The two class periods devoted to this experiment were far more valuable, in my opinion, than two periods of basketball, volleyball, or fencing.

Eleanor Metheny at the University of Southern California has made many major contributions in the area of human movement and the meaning of human movement. Last year at our meeting in San Francisco, we learned of the fine work now being done at UCLA and some other colleges and universities throughout the country in applying practical physiology in their basic programs. If we, as physical educators, can let the predental student know that he has chosen a profession with the highest ratio of coronaries and *why*, then this is a practical application of applied physiology.

The college student today is bombarded from all directions with well-organized, highly attractive advertisement gimmicks. Tobacco in various forms is being given free to our students and all kinds of ergogenic aids to "keep going" are constantly being urged upon our students. Who in the educational picture is better prepared to put the facts about usage of these products before the student than the health and physical education professors?

We are all concerned today with the colleges and universities that are reducing or eliminating the basic program. Legislators in Texas recently passed a rider on an appropriation bill that would prevent any state supported institution of higher learning from using funds for the "operation or maintenance of compulsory physical training programs." The rider was not intended to affect "organized instructional classes for students majoring in physical education or programs of mass calisthenics conducted with the purpose of encouraging appreciation of the science of bodily exercise without apparatus or equipment." Activities such as dance, fencing, horseback riding, and golf were specifically mentioned. We must notice that even these uninformed (or perhaps misinformed) legislators did not exclude the "science of bodily exercise" idea. Fortunately the rider was invalidated by the attorney general; otherwise, our profession would have been dealt a severe blow in Texas.

Perhaps this will cause an awakening on the part of some of the members in our profession. The leaders in this state have certainly never before spoken out in opposition with such accord. The harmony of the professional people in Texas is to be commended.

It was felt by some that the "back to the body movement" was the cause for such an action. This is only a part of our problem. The public has long been aware of the "throw out the ball programs" of physical education. If the shoe fits in our case, we must wear it.

As stated in the Ohio State University booklet on *The Contributions of Health Education and Physical Education,* "there need be no apology for exercise. It may be unpopular with some. It may represent values held in low esteem by those who believe the 'body' to be crass and the mind exalted. But all such regard for physical activity denies the intellectual integrity of him who holds the value low. He betrays how little he knows of the true facts, the true nature of man."

To paraphrase Jesse Feiring Williams, if we as a profession are to lift ourselves above the sandlot coach status, then we must be able to present our field as a body of knowledge that is academic in every way. Applying a body of knowledge of elementary physiology in our basic program would add depth and meaning to physical education.

reports

PRESIDENT'S REPORT

Karl W. Bookwalter

My report will be brief and will lean somewhat on the efforts of the previous year's officers and heavily on the work of additional workers. If this report is a bit cockeyed, blame it not on the others but on my effort to look ahead while reporting the past.

First, I should like to compliment Past-President Jamerson, Past-Secretary Mackenzie, and Past-Membership Chairman Donnelly on a 36 percent increase in membership. An all time high of 914 members has been reached. This is a mixed blessing under present rules, which require 15 percent attendance at Association business meetings for a quorum. Also, sheer numbers are not an adequate measure of the strength of an organization. Their attendance, participation, and leadership are indispensable.

This is not to belittle past achievements. Witness L. J. Rickerts, the present membership chairman, and his committee, who are working heroically to maintain the level already attained. I would like to urge all to become *more active* participants in our potentially powerful association.

A second major breakthrough has been the "joint" publication of the professional magazine *Quest* by the NAPECW with a $2000 financial assist from NCPEAM. The groundwork for this subsidy was also laid under the aegis of Jamerson and Mackenzie. Your President met with Wilma Gimmestad, Leona Holbrook, and others to ascertain their goals and needs and to determine what part we would be expected to play in the successful promotion of *Quest*.

Your response to the Association-wide poll was heavily in favor of going along, without further research, with the determined and loyal group of NAPECW members. Although not too many indicated they would subscribe, I trust the fine first issue will bring about a justified reversal in this attitude. We must now determine whether we are to be shareholders and contributors of articles or will pass up another opportunity to make a professional contribution. Our members, E. C. Davis on the Editorial Board and F. B. Roby on the Finance Committee have represented us in this venture.

Again, on the positive side, I have appointed H. E. Kenney to represent us on the AAHPER-Athletic Institute Committee for the Facilities Guide revision. Further, I appointed A. E. Florio to represent us on the AAHPER Committee for the production of a booklet on *Suggested School Safety Policies*.

We have continued our affiliation with the International Council for Health, Physical Education, and Recreation.

Your President's proposal of an Undergraduate Preparation Score Card project met with a varied response. In light of this, it appears to be best to withdraw the proposal.

On the Basic Issues project only four issues were cleared, out of about 100. Three sections failed to elicit any items, largely because of the ineffective planning of your then President-Elect. Against his hopes but in light of his judgment these issues will not be brought before you by him as scheduled. The reasons are:

1. The issues would be unrepresentative of the NCPEAM attitude in *general*.
2. Those issues salvaged are now badly out of context.
3. They are quite innocuous, e.g. "Recognizing that intramural programs benefit greatly from the college basic skills program, the retention and improvement of both are encouraged." Like love, we are for it till we come to the details.
4. Finally and further, this judgment is made in light of a similar failure to obtain consensus on basic issues by two well structured sessions and a mail vote by the Academy of Physical Education last year.

Just for the record, your attention is called to another success attributable to the Jamerson regime. To the original name of the College Physical Education Association for Men has been prefixed the word "National". We are now officially called the National College Physical Education Association for Men.

Three meetings of your executive council have been held with a quorum or better present. They were polled three times and the membership was polled once. Two Newsletters have been published. One study of the institutional representation on committees for the years 1961 to 1963 was made. It was discovered that a rather equitable representation and attendance exists except for institutions with enrollments of 999 or less. Membership correlated with attendance .943, with NCPEAM committee assignment .715.

Another study of NCPEAM membership was made for the past 11 years (1953 to 1963). Membership increased regularly from 523 in 1953 to 771 in 1959. A steady drop until 1963 (under Jamerson) when the record increase previously mentioned (up to 914) was made.

Under the excellent direction of Richard Donnelly, the entire code manual has been revised and approved by your Executive Council. All new association section officers will be sent one.

Finally, in light of an approved rotation scheme for which your President, modestly, largely assumes credit, the committee for "time and site" has recommended that Minneapolis shall be the host city for the 1964-65 meeting and the host city for the year 1965-66 shall revert back to the East. This committee under Richardson has won a "well done" accolade.

One hundred percent of committee reports have been filed or will be made at this Convention. Your President is deeply grateful for this cooperation. In addition to these, your program and convention arrangements speak for themselves. Our thanks go to President-Elect Nixon and to Convention Manager Standifer and his Southern Association.

FINANCIAL REPORT OF PAST-SECRETARY-TREASURER
NOVEMBER 30, 1962—FEBRUARY 28, 1963
Generalized Statement

Permanent Fund			
Cash balance, November 30, 1962	$2,438.85		
Deposit—January 11, 1963	300.00		
Interest earned	48.76		
Cash balance, March 1, 1963			$2,787.61
Operating Budget Fund			
Cash balance, November 30, 1962		$1,763.04	
Cash income (Attachment #1)	$1,806.65		
Less cash expenditures (Attachment #1)	2,483.80		
Excess disbursements over Receipts		677.15	
Cash balance, February 28, 1963			$1,085.89[a]
Combined funds equity			$3,873.50

[*Attachment #1*]

Statement of Cash Income and Expenditures
December 1, 1962 - February 28, 1963

Cash Income		
Membership dues (1—1964; 15—1963)	$ 80.00	
Rebate, mailing service	7.65	
Membership dues (40—1963)	200.00	
Membership dues (17—1963)	85.00	
Registration petty cash	195.00	
Luncheon receipts	434.00	
Membership dues (161—1963)	805.00	
Total Cash Income		$1,806.65

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[a] Not true reflection of Association's Cash Balance since $1,000.00 was transferred to David O. Matthews, new Secretary-Treasurer, for operating purposes.

Cash Expenditures			
Convention—1962			
Registration, petty cash	$ 195.00		
Convention manager, petty cash	25.00		
Equipment rental	6.76		
Honorarium, Luncheon speaker	25.00		
Printing (Tickets and Program)	116.73		
Honorarium, General Session speaker	75.00		
Hotel Whitcomb	18.67		
Student services	100.00		
Luncheon	444.50		
Hotel Whitcomb	13.81		
Publicity	14.30		
Total Convention—1962		$1,034.77	
General Operations			
Telephone	$ 1.35		
Telephone	3.55		
Postage	4.00		
Postage	10.20		
Shipping charges	17.28		
Addressing service	7.65		
Transfer of funds to David O. Matthews	1,000.00		
Total General Operations		$1,044.03	
Services			
Auditor (1961 and 1962)	$ 100.00		
Investments			
Northern Valley Savings and Loan Association	$ 300.00		
Miscellaneous			
Refund for dues overpayment	$ 5.00		
Total Cash Expenditures			$2,483.80

Approved by Finance Committee
NCPEAM, January 9, 1964
Ernest B. Smith
Chairman

Submitted by,
M. M. Mackenzie

REPORT OF SECRETARY-TREASURER

AUDIT REPORT AS OF NOVEMBER 30, 1963

Statement of Receipts and Disbursements
For the Fiscal Year Ended November 30, 1963

Operating Budget Fund

Fund Balance, December 1, 1962		$1,850.69
Receipts:		
Membership dues	$2,415.00	
Banquet fees	434.00	
Publication proceeds	928.92	
Redeposit of registration fund (See below)	195.00	
Miscellaneous	.50	
Total Receipts		3,973.42
		5,824.11

Disbursements:			
Printing Newsletter and stationery		566.38	
Supplies and postage		345.31	
Stenographic services		21.84	
Secretary-Treasurer's fee		300.00	
Audit		100.00	
Dues refunded		15.00	
Affiliate organizations fees		20.00	
Transfer to permanent fund (Exhibit B)		300.00	
Convention expense:			
Registration funds (See above)	$195.00		
Hotel and Banquet charges	643.74		
Honorarium	100.00		
Programs, badges, etc.	185.51	1,124.25	
Miscellaneous		4.90	
Total Disbursements			2,810.28
Fund Balance, November 30, 1963			$3.013.83

Bank Reconciliation

Balance per bank statement	$3,081.48
Less outstanding check #122	67.65
Fund Balance, November 30, 1963	$3,013.83

Summary of Funds on Hand
November 30, 1963

Checking account—The Champaign National Bank, Champaign, Illinois	$3,013.83

Permanent Fund

Fund Balance, December 1, 1962		$2,438.85
Additions:		
Transfer from Operating Budget Fund (Exhibit A)	$300.00	
Interest earned during year	103.50	
Total Additions		403.50
Fund Balance, November 30, 1963		$2,842.35

Summary of Funds on Hand
November 30, 1963

Account #2614—Tenafly Mutual Savings and Loan Association, Tenafly, New Jersey	$2,842.35

Approved by Finance Committee
NCPEAM, January 9, 1964
Ernest B. Smith
Chairman

Submitted by,
David O. Matthews
Secretary-Treasurer

PROPOSED OPERATING BUDGET, FISCAL YEAR—1964

Reserve Fund carried over December 1, 1963		$3,013.83
Receipts		
Membership dues (700 @ $5.00)		$3,500.00
Publication sales		600.00
	Total Receipts	$7,113.83
Expenditures		
Proceedings		$2,400.00
Annual Meeting		300.00

Newsletter	450.00
General operation	300.00
Investment	300.00
Services	300.00
Contingency	50.00
Total Expenditures	$4,100.00

Operation Manual of the NCPEAM

Duties of the Secretary-Treasurer Page 17, Sec. 7 (Finance), item d. "Prepare a proposed operating budget for the coming year for review by the Finance Committee. Finance Committee then submits its revised budget to the Executive Council for final approval."

Approved by Finance Committee
NCPEAM, January 9, 1964
Ernest B. Smith
Chairman

Submitted by
David O. Matthews
Secretary-Treasurer

Minutes, Executive Council

EXECUTIVE COUNCIL MEETING
May 4, 1963
Minneapolis, Minnesota

Present: Bookwalter, Nixon, Matthews, Masley, Standifer, Husman, Kovacic, Heston, Hess, Roby, and Havel.

1. Meeting was called to order at 8:10 A.M. by President Bookwalter.
2. Minutes of the last Executive Council Meeting were read and approved.
3. President Bookwalter reported that there was an excellent response from the members chosen for the various committees.
4. President-Elect Nixon gave a progress report on the 1964 Convention Program. The Executive Council members had voted to title the 3rd General Session—"Physical Education as An Academic Discipline." The Fellowship of Christian Athletes will hold a breakfast at the Convention. Members attending will pay for their meal.
5. Jim Standifer, Convention Manager, reported on hotel accommodations. There will be 2 suites or 4 rooms for the officers furnished by the Hotel Baker. Plans for the Convention are progressing well. The luncheon will cost $3.00 per head. Ted Banks of the Athletic Institute is to be approached to see if the Institute will underwrite the expenses of the President's Reception.
6. Matthews read a letter from the Internal Revenue Service. The IRS has ruled that the NCPEAM is not tax exempt.
7. The Seven Basic Issues part of the Convention was discussed. Nixon outlined several courses of action:

   a. Nothing is to be done. This would overrule the motion of the Executive Council of last December.
   b. A report to the membership as points of information can be made to the membership through the Newsletter.
   c. Get the issues in a resolution stage for discussion and vote by the membership.
   d. Delay for further study.

   Motion by Bookwalter: President will attempt to identify proposed issues for discussion to be put into a Newsletter. A mail ballot will be taken and the vote reported at the Convention. Second by Husman. Motion carried.
8. It was proposed by President Bookwalter that the Construction and Equipment Committee be discontinued. A suggestion was made that the chairman of that committee

contact Mabel Lee of AAHPER for discussion as to the value of continuing the committee.

9. Bookwalter reported that he would meet with Gimmestad and the NAPECW to discuss the joint publication of a physical education journal.
10. Roby made a report of the work of the proposed Standing Committee on Research. An outline of the possible terms of office and candidates for the committee had been dittoed and this material was given to Council members. It was moved by Roby that the report should be presented to the membership at Dallas for their vote on acceptance after discussion. Seconded by Havel. Motion carried.
11. Deane Richardson's list of criteria on the picking of a time and site for future conventions was read by Matthews. Deane Richardson was to be contacted to urge him to carry out further investigation of suggested sites.
12. A very brief discussion on the inclusion of a driver education section in the future conventions was held. It was agreed by common consent that such a section was not to be included.
13. Husman suggested that some study ought to be made to determine the feasibility of hiring a full time secretary-treasurer. Bookwalter stated that a study to decide the need for one should be made first.
14. Meeting was adjourned at 10:00 A.M.

Respectfully submitted,
David O. Matthews
Secretary-Treasurer

EXECUTIVE COUNCIL MEETING
January 8, 1964
Dallas, Texas

Present: Bookwalter, Nixon, Matthews, Masley, Husman, Weston, Roby, Jamerson, Boycheff, Flanagan.

Absent: Hess.

1. Meeting was called to order at 7:15 P.M.
2. Minutes of the Minneapolis meeting were read and approved.
3. Nixon congratulated all members present for their part in the preparation of the program.
4. Standifer reported that it had been difficult to find a sponsor for the President's reception. He suggested that the registration fee include enough to pay for a reception. He recommended that a standard hotel contract form be prepared for use by the convention manager. Nixon volunteered to prepare a contract form to be presented to the Executive Council for approval.
5. Bookwalter read the Necrology report from Ray in which it was recommended that the necrology certificates be framed for presentation to the next of kin of the deceased. Moved by Husman and seconded by Jamerson that funds be spent for this purpose. Motion passed.
6. Moved by Jamerson and seconded by Roby that the NCPEAM should adopt a policy that no funds be allotted to any committee members for travel. Motion carried.
7. The proposed budget for 1964-65 was submitted to the Council for consideration. A recommendation was made that an additional $200 be added to convention expenses. The proposed budget was approved and is to be sent to the Finance Committee for further study.
8. Bookwalter read the letter from the CPA auditors on the status of the financial report prepared for the secretary-treasurer. The treasurer's report was approved for reading to the General Assembly.
9. Richardson presented the deliberations of the Time and Site Committee which recommended that the next (1965) convention be held in Minneapolis on the 28, 29, and 30 of December. Because of racial unrest, it was suggested that the southeast be bypassed in favor of a north central meeting, then a meeting in the east, followed by a meeting

in the far west. It was moved by Richardson and seconded by Matthews that the next, 68th, meeting be held in Minneapolis at a date to be decided by the members present at the business meeting. Motion was passed.

10. Jamerson indicated that since it was very difficult to obtain the names of three persons to run for the office of President-elect, the Constitution should be changed to permit two nominees instead of three to be submitted for the election. He moved that Article IV, Section 1 be changed by referring the question to the Constitution Committee which would then present the motion to the members present at the business meeting. Motion seconded by Masley. Motion was passed.
11. Bookwalter reported on the Basic Issues and indicated that those issues submitted for intramurals and basic instruction should not be presented for consideration by the General Assembly because of the unrepresentative manner by which the selected issues were finally obtained.
12. Meeting was adjourned at 10:00 P.M.

Respectfully submitted,
David O. Matthews
Secretary-Treasurer

EXECUTIVE COUNCIL MEETING
January 9, 1964
Dallas, Texas

Present: Bookwalter, Nixon, Matthews, Masley, Husman, Weston, Roby, Jamerson, Flanagan, Boycheff.

Absent: Hess.

1. Meeting was called to order at 9:00 A.M.
2. Minutes of the previous meeting were read and approved.
3. Donnelly reported on the work of the Operating Codes Committee. He distributed copies of the Operating Manual and lists of the suggested changes his committee had secured from members. The Executive Council discussed each proposed change and decided on each item to be added, changed, or deleted from the Manual.
4. Roby presented a summary of the progress of the publication *Quest*. He stated that the NAPECW had voted $4,000 of its funds for the continuance of the magazine. The NCPEAM *had* voted to contribute $2,000 last year in order to help get the magazine into circulation. All NCPEAM members in good standing received copies of the first issue and will for the next three issues. Roby indicated that he would recommend two courses of action: (a) NCPEAM to agree to support the publication financially for an additional 2 years, (b) NCPEAM should meet with NAPECW in Washington at the AAHPER convention to discuss financial problems. Roby moved that the NCPEAM should agree to cooperate in an investigation of ways and means of supporting beyond the current two year period the continuance of *Quest* through discussion by representatives of NCPEAM and NAPECW in Washington in 1964. Seconded by Boycheff. Motion carried.
5. Moved by Husman and seconded by Weston that the NAPECW be commended for their efforts in initiating the establishing of *Quest* as an outstanding publication. Seconded by Weston. Passed unanimously.
6. Moved by Donnelly that a report be made to the General Assembly on the work of the Operating Codes Committee and that this committee be added to the list of standing committees as listed in the Constitution, Article IX, Section 4. Seconded by Bookwalter. Motion carried. The proposed constitutional change will be presented to the membership at the business meeting for their vote on the change to the Constitution.
7. Moved by Husman and seconded by Boycheff that chairmen-elect should be expected to attend Executive Council meetings without voting privileges. Motion carried.
8. Meeting was adjourned at 12:35 P.M.

Respectfully submitted,
David O. Matthews
Secretary-Treasurer

EXECUTIVE COUNCIL MEETING
January 10, 1964
Dallas, Texas

Present: Nixon, Weston, Bookwalter, Matthews, Brumbach, Livingston, Kovacic, Dodson, Schmidt, Havel.
Absent: Wireman.

1. Meeting was called to order at 10:15 A.M.
2. Minutes of the previous meeting were read and approved.
3. Standifer reported on the convention. Honoraria to the amount of $93.76 had been spent. He wishes to thank all persons on his staff who helped in any way to put on the convention.
4. Nixon expressed his concern over the section of Dr. Conant's lastest book in which physical education graduate research was implied to be unworthy of the term graduate research. Richardson suggested that some outstanding person in the Association, such as Esslinger, be asked to write a rebuttal. Bookwalter stated that the NAPECW should be asked to work with the NCPEAM on this problem. Nixon asked Havel (a) to contact any group feasible to assist in building up a defense case and (b) to propose courses of action at the next Council meeting. Moved by Brumbach, seconded by Livingston that a President's committee be formed to carry out a suggested plan of action. Motion carried.
5. President Nixon discussed the responsibilities of the president-elect and those of the section chairman.
6. President-elect Weston made several remarks on the techniques to follow in preparing for the next annual meeting. Discussion followed on the program format.
7. Meeting was adjourned at 11:00 A.M.

Respectfully submitted,
David O. Matthews
Secretary-Treasurer

Minutes, Association Business Meeting

FIRST GENERAL SESSION
January 9, 1964
Dallas, Texas

1. Meeting was called to order by Past-President Jamerson at 3:40 P.M.
2. Jamerson introduced the speaker, Dr. James M. Moody, Vice-Chancellor for Academic Affairs, Texas Christian University. Dr. Moody's topic was "What is Everybody's Business. . ."
3. President Karl W. Bookwalter delivered a report recapping the work of the Association during the past year.
4. President Bookwalter called for committee reports. Reports were given on the operation of the following committees: Committee on Physical Education and Athletics, Committee on Physical Education for College Men and Women, Operating Codes, Constitution, Convention Program, Foreign Relations, Historical Records, and Necrology. Florio submitted a report on the AAHPER conference on accident prevention in physical education, athletics, and recreation.
5. Meeting adjourned at 5:25 P.M.

Respectfully submitted,
David O. Matthews
Secretary-Treasurer

SECOND GENERAL SESSION
January 10, 1964
Dallas, Texas

1. Meeting was called to order at 10:50 A.M.
2. The Secretary-Treasurer's report was given by Matthews.
3. Ernest Smith, chairman of the Finance Committee, reported on the proposed budget. He moved its adoption. Second by Rickert. Motion carried. Moved by Smith, seconded by Adams that the report of the Secretary-Treasurer be approved as read. Motion carried.
4. Past-President Jamerson presented the slate of nominees for the offices of president-elect, member-at-large, and secretary-treasurer.

President-Elect	Burris Husman
	Henry Schenk
	Arthur Weston
Member-at-Large	Charles Kovacic
	Vernon Sprague
Secretary-Treasurer	David Matthews

Elections were held and the following were chosen as officers for 1964-65:

President	John Nixon, Stanford University
President-Elect	Arthur Weston, Brooklyn College
Member-at-Large	Charles Kovacic
Secretary-Treasurer	David Matthews

5. Committee reports were given on the operations of the following: Membership by Lewis Rickert; Public Relations by Gene Asprey; Resolutions by Deane Richardson; Time and Site by Deane Richardson; Education Television by Chalmer Hixdon; Joint Committee with NCAA—no report; Policies Committee—no report; Research Committee by Fred Roby.
6. Deane Richardson, when presenting his report on Time and Site, informed the assembly that Minneapolis was the site approved by the Executive Council. Moved by Richardson, seconded by Boycheff that the dates of the next meeting should be December 28, 29, and 30. Motion defeated. Moved by Asprey, seconded by Jamerson that the next annual meeting be held on January 14, 15, and 16. A substitute motion was introduced and seconded that the meeting be held on January 7, 8, and 9. Motion carried. Original motion was defeated. *The next annual meeting will be held in Minneapolis on January 7, 8, and 9, 1965.*
7. A motion was made by Roby and seconded by Kovacic that a standing Research Committee be established. This involves a Constitutional change in that the committee name must be added to the list already in the Constitution, Article IX—Committees, Section 4. Motion carried.
8. Moved by Donnelly, seconded by Matthews that the Constitution, Article IX, Section 4 be amended to include the Operating Codes Committee as a standing committee. Motion carried.
9 Meeting adjourned at 12:10 P.M.

Respectfully submitted,
David O. Matthews
Secretary-Treasurer

CONSTITUTION COMMITTEE

The Constitution Committee met January 9, 1964, at 11:30 P.M., at the Baker Hotel, Dallas, Texas, and as a result of this meeting, the Committee recommends the following action:

1. That the President appoint a committee to study Article II, Sec. 1, "Objectives" of the Constitution, to clarify the objectives in view of our problem with the Internal Revenue Service.
2. When the objectives are revised, the term, "Allied Fields" in Article I, Section 2 of the By-laws should be clearly defined.
3. The Committee recommends the following changes in the Constitution and By-laws:
   - (a) The Constitution should be revised, wherever necessary, to include the new official name of the Association.
   - (b) Article V of the Constitution should be revised to include the states involved in the Western society.
   - (c) Article III of the By-laws, "Officers and Duties" should include a new section as follows: *Section 5*—The office of Secretary-Treasurer shall, in the event of a vacancy, be filled by a member recommended by the President and approved by the Executive Council for the unexpired term.
   - (d) All sections of the By-laws pertaining to the Executive Council, officers, committee members, and sections be amended to state that, "Any person holding office in the association must be an active member."
   - (e) Revise Article IV, Section 1 of the By-laws by deleting all of sentences 1 and 2 and substituting the following: "A nominating Committee consisting of the three immediate Past-Presidents shall be instructed by the President to prepare a slate of at least two names for the office of President-Elect and Council Member-at-Large: the retiring President to Service Chairman.
   - (f) Revise Article IX, Section 4 of the By-laws by adding: "And Operating Codes" at the end of the section.
   - (g) The Committee suggests that the Secretary be instructed to make these changes and notify the membership in the first newsletter.

Respectfully submitted
Joe Pease
Chairman

CONVENTION MANAGER'S REPORT

In accordance with established custom, I wish to submit the following report on the Sixty-Seventh Annual Conference of the National College Physical Education Association for Men which was held January 8-11, 1964 at the Baker Hotel, Dallas, Texas.

The convention could be described in a nutshell as being a happy convention. The program showed strength, the meetings were well attended, the hotel accommodations were adequate or more than adequate, and there seemed to be no complaints about confusions or property mix-ups.

The convention was requested for Fort Worth at both the Kansas City and San Francisco conventions and was granted, at San Francisco, to the Fort Worth-Dallas area with the emphasis being placed on Fort Worth. The accommodations in both Fort Worth and Dallas were approximately equal, but after studying the airline schedules of the two cities, it was decided to place the convention in Dallas. Another factor involved was that there was some uncertainty whether the hotels would accept colored members of the association as guests on a fully integrated basis. This proved to be a false barrier, however, since the writer had exacted pledges that full guest privilege would be extended to the colored members. It is worthy of note that, although the convention was not held in Fort Worth, it broke the color barrier in the hotels of Fort Worth, and a public announcement in regard to this policy was made shortly thereafter. It would appear that the effort to place the convention in Fort Worth was not without value.

After appointment as Convention Manager, I first studied the convention Operating Manual and started implementing the various tasks as they were laid out.

The next step was to seek out our respected colleagues from Southern Methodist University and discuss with them the means of overcoming some of our problems. They agreed readily to undertake certain sub-committee chairmanships and other responsibilities which, by their nature, required handling on a local basis.

It was recommended to President Bookwalter that the following appointments be made:

Dr. Steve Brown, SMU, Assistant Convention Manager and Chairman of the Arrangements Committee
Dr. Lloyd Messersmith, SMU, Chairman of the Hospitality Committee
Mr. N. A. Ponthieux, Texas A & M, Chairman of the Publicity Committee
Dr. Jess Cearley, NTSU, Chairman of Banquet and Reception
Mr. A. R. Barr, SMU, Registration and Information

The appointments received the approval of Dr. Bookwalter, and the various sub-committees swung into action, quickly getting the organization of the convention underway.

Under pressure of other duties, Dr. Cearley later delegated his task to Dr. Jack Watson, one of his assistants at North Texas State University. Mr. Barr's duties were undertaken by Mr. Paul Hook, another member of the SMU faculty, after Mr. Barr suffered a rather severe heart attack from which, it is to be noted with pleasure, he is recovering.

Even before the various appointments were finalized, Dr. Lloyd Messersmith undertook, since he was personally acquainted with many of the hotels and their management, the task of securing information from them in regard to rates, accommodations, and the fulfillment of conditions stipulated by the NCPEAM. This information was sent to the proper Association officials who, in turn, delegated the task of selecting the hotel to the local committee. After consultation by the committee, all the hotels were eliminated, except the Baker and the Adolphus hotels, either of which would have been satisfactory for our purpose. Since it was necessary to select one of the two hotels, the Baker was selected.

One of the knottiest problems arising during the early part of the convention was the matter of making up a budget. The convention manual called for a budget to be submitted to the Executive Council for approval. As I did not have a copy of the NCPEAM Operating Code, which is separate from the convention manual, I was somewhat baffled by my lack of knowledge of past customs and practices followed, and which items could be included in the budget. Some of the questions arising were answered by correspondnece, others were never fully answered. It was found that some, if not all of the previous convention managers, had felt their way along, much as I was destined to do. Happily, this problem has been resolved for the future by action of the Executive Council in providing a flat sum for the use of the convention committee in staging future conventions. My experience indicates that the sum granted by the Executive Council for the task should be adequate.

The convention expenses were considerably lessened by the absorption of much of the preconvention expense by the schools employing the chairmen of the sub-committees. I would like to make a point of expressing my gratitude for this assistance.

It was necessary for the convention manager to carry on a considerable amount of correspondence in pursuit of his duties, but there were no really traumatic experiences (except, perhaps, the problem of finding someone to pay for the President's Reception) involved in the organization and the operation of the convention. The sub-committees worked so faithfully that it was only necessary to secure a progress report from them from time to time.

The President's Reception is a problem in regard to which a definite policy needs to be established. It is a very worthwhile project, as indicated earlier, but it apparently has tended to grow with each succeeding convention until it has become a major convention expense—the largest single unreimbursed expenditure involved in staging the convention.

It is customary for the convention manager to close his report by making recommendations. I have few recommendations to make. Most of those that normally would have been made have been resolved already by action of the Executive Council, and therefore, need no further mention here.

I do, however, have one recommendation with an alternative that I would like to make in regard to the President's Reception. It is as follows:

That prospective seekers of the convention be apprised in advance of the financial demands that will be placed upon them in order that they may evaluate their resources in view of these demands.

Alternative:

That the Association set up a fund for this purpose and define the limits to which the entertainment might go.

One implication to be derived from the present policy is that if they are faced with a somewhat heavy outlay of money in order to stage the conference, sponsors might be reluctant to step forward.

As a last word, let me say that the staging of this convention has been a very stimulating activity for me, and I have derived a great deal of pleasure from the many contacts I made with the Association members during the year.

Respectfully submitted
James W. Standifer
Convention Manager

FOREIGN RELATIONS COMMITTEE

The Committee carried on its business by mail during the year and did not have an opportunity to meet until the Annual Convention.

Your Chairman was appointed as the representative for NCPEAM to the International Council for Health, Physical Education, and Recreation in May 1963. The highlights of the 6th ICHPER Congress held in Rio de Janeiro and the resolutions that were passed by the delegate assembly are available upon request by writing the Chairman of this Committee.

During the year Committee members exchanged views with visitors from over 14 different nations, all of whom were sponsored by either the State Department, AAHPER, or ICHPER.

Contact was made with Earle Zeigler, a past chairman of this Committee, and present editor of the International Relations Section Newsletter of the AAHPER so that future information of a foreign relations nature might be readily exchanged.

Major L. E. Owens, Deputy Head, Department of Physical Education at the United States Air Force Academy and a member of this Committee, has been engaged in several discussions on physical education with foreign military personnel. Perhaps a paper on foreign physical education from a military point of view might be feasible in the future.

The Committee has recommended that a new paragraph be added to section two, Organization, of the Foreign Relations Committee for consideration by the Operating Codes Committee. This paragraph would read "A permanent file shall be maintained by the Chairman consisting of correspondence with foreign nations, all existing projects that are underway, and all information relating to such things as future trends, research, and so forth so that continuity can be maintained over a period of years." This file shall be turned over to each new Chairman.

NEW PROJECTS

1. In light of the fact that the '64 Olympics are being held in Japan, perhaps a paper might be prepared for presentation at the next Annual meeting on "Future Trends in Japanese Physical Education."
2. The establishment of a continuing correspondence with physical educators from other lands.
3. Utilize to a greater advantage information from foreign students who are currently enrolled on United States campuses.

Three Committee members complete their term of office this year and will have to be replaced by members who will serve for a three-year period.

Respectfully submitted
John J. Costello
Chairman

HISTORICAL RECORDS COMMITTEE

The work of the Committee has been carried on by correspondence. A communication was addressed to the members in September suggesting matters to be considered and acted upon. On December 6 a second letter was sent out carrying a report of activity during the fall and suggestions to be acted upon by the Committee members.

Professor Guido Foglia, who has been working to catalog the documents of the Association which are on deposit at Queens College, has completed the microfilming of the early minutes of the Association, and also has completed the index of the *Proceedings* from 1940 through 1963. He now is reviewing correspondence and other materials to determine their historical significance and to prepare them for library acquisition.

The collection of *Proceedings* now held by Queens College is not complete. Members of the Committee have agreed to try to secure the missing volumes, and this request should be addressed to the membership in attendance at the annual meeting. The issues from 1922 through 1936 and 1961-1963 are needed.

The Committee has also agreed to invite members who have documents of historical nature to donate them to the Association to become part of its collection.

Those members of the Committee who have responded, favor going ahead with a project the purpose of which would be to record on tape interviews with leaders of long standing in the field of college physical education. The idea is to choose people who have made recognized contributions to the college field but who have not necessarily published extensively, as well, perhaps, as some who have written about their ideas. Such a project requires more time to plan, and also will require funds to support it.

Members of the Association are requested to consider the following recommendations:

1. That the *Proceedings* carry a statement inviting members to donate copies of *Proceedings* which will complete its library collection;
2. That the Secretary place Queens College on his mailing list to receive one copy of each published item, including committee reports. To date the College has not received current issues of *Proceedings* as they have been distributed. (Until further notice, Professor Foglia should be designated as the one to receive the copy for the College);
3. That the Historical Records Committee be authorized to prepare a detailed proposal for the taping of interviews with leaders in the field, and that an Executive Committee be empowered to grant funds to support the first steps of the project after these are planned, approved, and cost of their implementation is determined;
4. That the membership of the Association appropriate funds to pay for the publication of the Index of the *Proceedings* for the period 1940-1963. An estimate of this cost is $200-$400; also, the membership or the Executive Committee should decide on the policy governing distribution of the Index, e.g., by sale to members and others, or by free distribution to members and sale to others, or other arrangement;
5. That through either the Committee or Officers of the Association, discuss with the Archivist for AAHPER the idea of designating the College Physical Education Association repository as the official center for historical materials dealing with the College field. (In her report of March 9, 1963, the Archivist noted that the AAHPER would have to designate several centers as repositories for their historical materials.)

In the Operating Code for the Historical Records Committee, one of the stated purposes is to "maintain a permanent history of the Association." In so far as the Committee can collect, organize, catalog, and make available for study historical materials, or copies of them, this objective can be met. To maintain a narrative account of the Association's history probably is a job for one person who may be designated as the Historian for the Association. The matter should be considered.

Respectfully submitted
Glenn W. Howard
Chairman

FINANCE COMMITTEE

The following reports by David O. Matthews, Secretary-Treasurer, were approved by the Finance Committee:

1. Operating Budget Fund
2. Permanent Fund
3. Proposed Operating Budget, Fiscal year of 1964.

Submitted by
Ernest B. Smith
Chairman

MEMBERSHIP COMMITTEE

The Membership Committee endeavored primarily to enlist new members in the association and to reinstate delinquent and previously enrolled members. The 50 states, Canada, and Puerto Rico were divided into areas and each Committee member assumed the responsibility of recruitment in his assigned area. The Committee invited each member of the association to enroll a new man. Also, the committee sent a follow-up card reminding the association members of new enrollments.

Committee members submitted suggestions for the improvement of the operating code of the committee and of the general functions of the committee. A summary of these suggestions has been presented to the Operating Codes Committee.

The status of the membership as of January 3, 1964, was as follows: Renewals 440; New 84; Delinquent 308; Honorary 42; Deceased 6; Total 880.

The annual meeting of the Committee scheduled for January 9, 1964, was not official due to the lack of a quorum.

Respectfully submitted
Lewis J. Rickert
Chairman

NECROLOGY COMMITTEE

1. As in past years the committee wrote to NCPEAM members in the 50 states, Canada, and Puerto Rico. Initial letters were mailed September 20 and a follow-up was sent where necessary. This correspondence, supplemented by the excellent assistance of the Association's officers, revealed the names of six deceased members:

   Charles C. Cowell, Purdue University
   Donovan C. Moffett, State University College, Cortland
   Golden Romney, Washington State University
   Dale R. Sprankle, Albion College
   Solon B. Sudduth, George Peabody College
   Ralph H. Young, Michigan State University

2. A close friend of each of our departed associates was asked to write a memorial statement. These biographies will be presented to the convention and will appear in the *Proceedings*.
3. Notice of Dale Sprankle's death was received on December 23. Prompt attention by friends in getting his sketch to the committee permitted us to include this biography in our report.
4. Five of the memorial certificates approved at last year's convention have been completed and returned to the Secretary-Treasurer. These will be signed by the officers, framed, and forwarded to the immediate family of each deceased member as a simple expression of our esteem and affection. It is recommended to the Executive Council that No. 3 (m) of the Operating Code be revised to be consistent with procedures approved at San Francisco.
5. The members of the Necrology Committee wish to express our appreciation to those who gave us assistance in our somber task.

Respectfully submitted
Harold L. Ray
Chairman

Charles C. Cowell (1896-1963)

Charles C. Cowell, Ph.D., Professor of Physical Education at Purdue University, died Tuesday, August 13, in Washington, D. C., at the age of 67. Dr. Cowell was born in Joliet, Illinois, on June 24, 1896. His elementary and secondary education came by way of schools in Joliet; Middlesboro, Kentucky; Milwaukee and Racine, Wisconsin. He received his B.S. degree from Springfield College in 1921. He received his Master of Arts degree from Clark University in 1926 and the Ph.D. from New York University in 1935. He attended the University of Grenoble, France, in the summer of 1922 and did additional study at the University of Vienna, Austria, in 1928. He was married to Marion D. Dickson on August 5, 1924 at Pittsburgh, Pa. Their only child, Joanne S. Cowell, is employed in Washington, D. C. His sister, Miss Edna V. Cowell, of Washington, and another sister, Mrs. Pauline Kochevar, of Joliet, Illinois, are the other surviving members of his immediate family.

Dr. Cowell taught at Robert College in Istanbul, Turkey, from 1922 to 1929, and returned to teach at his Alma Mater, Springfield College, from 1930 to 1932. He taught at Ohio State University from 1932 to 1943, when he went to Greece as regional director of United Nations Relief and Rehabilitation Administration. In 1947, he returned from Greece and went to Purdue University as Professor of Physical Education, in charge of graduate work in health, physical education, and recreation—the position he held until his unexpected death. Dr. Cowell served in Naval Aviation in 1917 and 1918, interrupting his undergraduate work at Springfield College for such service in World War I.

Dr. Cowell was internationally known as an outstanding scholar and author. Recognizing his field as interdisciplinary, he began very early in scholarly work in most of the disciplines from which physical education draws. Both the breadth and depth of his personal scholarly attainments have made him recognized by students and colleagues as one of the truly outstanding authorities in his field. He was senior author of five books and junior author of one other. In addition, he was author of 35 major articles in various journals and developed a Social Adjustment Index for High School Use, the Cowell Test of Ability to Recognize Principles, the Cowell Personal Distance Test, and the Cowell Athletic Aptitude Test.

Numerous honors and awards have accrued in recognition of Dr. Cowell's prestige and accomplishments in the various phases of his work. Among these are the Jones Clark Scholarship, Clark University; the Shaw Scholarship, NYU; Fellow and Past President of the American Academy of Physical Education; Fellow of American College of Sports Medicine; and Honor Fellow of the AAHPER. In his local community and throughout Purdue University, he was a tireless worker in civic and university affairs. As a member of the Board of Directors of the YMCA, he was active in all operations of that organization—as well as being one of the most active participants in the volleyball league and other physical activities.

Through years of zealous efforts to promote education, "Charlie," his own preferred "title," was a man who loved his work and, best of all, loved people. He was modest to a fault, for he took personal credit for any achievement only as it was forced upon him. He was a quiet man who let his work and his writing speak more loudly than vocal cords could ever achieve. He was vitally interested in the kindergarten child and, at the other extreme, was vitally concerned with the people of any and every nation. He was impatient with narrowness—and even his impatience was kindly and helpful. He has made major contributions, both personally and professionally, which will be drawing a high rate of interest long after his most recently-observed kindergarten pupil has written his last words. "Charlie," as an exponent of both an "open door" and an open mind policy, was one of the rare educators who became well-known but will be even better remembered. His position will be filled, of course, but he will never be replaced.

Donovan C. Moffett (1900-1963)

Donovan C. Moffett, President, State University College at Cortland, New York, died April 16, 1963. He is survived by his wife and daughter.

Dr. Moffett was a native of Brocton, Illinois and was educated at Depauw University, Greencastle, Indiana; at Teachers College, Columbia University; and at the State University of Iowa where he received his Ph.D. In June 1962 he was awarded an honorary L.L.D. by Depauw University.

Interrupted by three years of service as an officer of the United States Army Air Force, his early teaching experience was gained at Depauw University where he served as professor of physical education, athletic coach, Chairman of the Department of Physical Education, and Director of Intercollegiate Athletics. At the time of his death, Dr. Moffett was a reserve officer of the USAF with the rank of Lieutenant Colonel.

"Tubby" Moffett, as he was affectionately called by his many friends in the Mid-West (this nickname was rarely used in the East), came to the State University College at Cortland in 1946 as professor of physical education and chairman of the Department of Physical Education for Men. Subsequently, he became director of the Division of Health, Physical Education, and Recreation at the College and in 1954 assumed the office of dean of the College. He was appointed acting president in 1958, and on September 15, 1960 was named president of the College.

During his professional career, Dr. Moffett was especially interested in the College Physical Education Association (NCPEA); the National Collegiate Athletic Association (NCAA); and the American Association of University Professors (AAUP). He was an active member of the American Association for Health, Physical Education, and Recreation (AAHPER) and of the New York State Association for Health, Physical Education, and Recreation (NYSAHPER).

Dr. Moffett was highly respected by the entire faculty of the State University College at Cortland. It was by unanimous vote that the faculty recommended his elevation to the presidency. His interest in health, physical education, and recreation never waned although his work during the past ten years was directed primarily toward the general administrative problems of the College.

Since Dr. Moffett's death in April 1963, two memorials to him have been established: the Donovan C. Moffet Memorial Scholarship by the Student Welfare Association of the College at Cortland, and the Moffet Memorial Carillon by the faculty and students of this College.

The following quotation is particularly fitting for Donovan C. Moffett: "The mass of men worry themselves into nameless graves while here and there a great unselfish soul forgets himself into immortality."

Golden Romney (1902-1963)

"Friend, Counselor, and Devoted Leader"

Dean Golden Romney was born on December 24, 1902, in Oaxaca, Sonora, Mexico. He died unexpectedly at his home in Pullman, Washington of a heart attack on August 7, 1963.

Golden's early days were spent in Canada with his father and mother, Thomas C. and Lydia Ann Romney, prior to his settling in southern Idaho. He completed his high school education at Preston, Idaho and then entered Brigham Young University as a physical education and recreation major. He graduated from BYU with an A.B. degree in June, 1926. He then became coach and teacher at Vernal, Utah for one year. In 1927 he became coach and chairman of the Department of Physical Education at Gila Junior College in Arizona. Golden Romney remained there until 1932, at which time he accepted a fellowship instructorate at New York University; he remained at NYU until 1935. He had completed some graduate work earlier at the University of California at Berkeley in 1928. He obtained his Ph.D. degree from NYU in October, 1936, a year after accepting the chairmanship of the Department of Physical Education and Health at New York State College. In 1950 he was named Dean of the College of Physical Education and Recreation at Washington State University, Pullman, Washington, and he remained there until his untimely death.

Long active in professional societies and organizations, Golden Romney was also an ardent worker for his Mormon Church. More recently, Dr. Romney served as President of the Northwest District American Association for Health, Physical Education and Recreation in 1958 and was, at the time of his death, President of the Western College Men's Physical Education Society and District Representative on the Executive Board of Directors of AAHPER. Dean Romney was a fellow of the American College of Sports Medicine and belonged to numerous other physical education and recreation organizations.

Beloved as a counselor and advisor by the students, epitomized as a devoted leader and inspirational speaker, Golden Romney leaves behind many friends and colleagues who have learned to associate his huge frame and his ready hand with his equally benevolent heart.

Dale R. Sprankle (1900-1963)

Dale R. Sprankle, retired Albion College athletic director, was born in Beach City, Ohio, in 1900. He died November 11, 1963 in Albion, Michigan, of a heart ailment.

Mr. Sprankle graduated from Canton Central High School, Canton, Ohio. He received his bachelor's degree from Mt. Union College, Alliance, Ohio, and earned the M.A. degree at the University of Michigan.

After coaching in Pennsylvania for a brief time, he became athletic director and head football coach at Adrian College (Michigan) in 1923. In the autumn of 1936 he moved to Albion College as head football coach. His Briton teams won Michigan Intercollegiate Athletic Association (MIAA) titles in 1939 and 1940. Also serving as track coach, he turned out conference champions in 1939-41, and 1946. His cross-country teams won titles from 1947-1955 and in 1957.

Having served as athletic director since 1941, "Coach" Sprankle (as he was known to students) gave up the football reins in 1946, but retained the direction of track and cross country. He instituted the Albion College Invitational Track Meet for high schools in 1937. This meet has been an annual spring event ever since, as has the cross-country invitational for high schools each fall. Dale Sprankle also started the NCAA small college cross-country run.

In 1947, he revived baseball as a varsity sport at Albion and coached the teams for two years. In addition, he maintained an active career as an official for basketball and football.

During World War II he corresponded with Albion alumni in the service, writing an estimated 30,000 letters to men all over the world. Mr. Sprankle had been in poor health since his retirement from the college in 1959. In all he served as director of the athletic program at Albion College for 18 years.

An ardent golfer when his health permitted, Dale Sprankle was a member of the Sigma Nu fraternity and active in the Albion Rotary. He belonged to the Methodist Church.

Solon B. Sudduth (1908-1963)

Dr. Solon B. Sudduth, professor and head of the Department of Physical Education, George Peabody College for Teachers, Nashville, Tennessee, died of a heart attack July 18, 1963.

In addition to his wife, Mrs. Dorothea Sudduth and mother, Mrs. S. B. Sudduth, Sr., he is survived by a son, Dr. Solon Scott Sudduth, Boston City Hospital, a daughter, Susan, a student at Sweetbriar College, Virginia, and two grandchildren.

He was born April 2, 1908, in Carbonhill, Alabama and attended public schools in Alabama. He was graduated in 1929 from Howard College in Birmingham. He began his professional career in 1929 at Georgetown College, Georgetown, Kentucky, as instructor in health and physical education, director of intramural athletics, and freshman coach of basketball, football, and track. For the next three years he served as a teacher and as director of the basketball and football programs at Goodwater (Alabama) High School.

Dr. Sudduth was next associated with Alabama College Training School, Montevallo, Alabama, as director of athletics. After a short time he began, in 1935, a five-year period at Henderson State Teachers College, Arkadelphia, Arkansas, as dean of men; director of health, physical education, athletics, and intramurals; and head coach in football, basketball, and track.

Dr. Sudduth obtained his M.A. (1934) and Ph.D. (1941) degrees from George Peabody College for Teachers. During 1940-42 he served as professor of education at Livingston State Teachers College, Livingston, Alabama. He returned to this institution as dean of men after World War II naval reserve duty. At his death he was a Captain in the U. S. Naval Reserve. Solon completed 20 years of satisfactory service in the Naval Reserve and commanded Naval Reserve Research Company 618 for ten years.

Solon Sudduth joined George Peabody College for Teachers in 1946 as head of the Department of Physical Education where he served as major professor for 41 doctoral candidates in the physical education department. He was active on numerous major college committees and served the community extensively in leading roles.

His professional activities were extensive, ranging from delivering addresses, providing consultant services, and making school surveys to serving as president of the Southern District, AAHPER. He held national and district committee chairmanships in the AAHPER and was president of the Tennessee College Physical Education Association in 1960-61. In 1962 he was named an official delegate to the President's Conference on Occupational Safety in Washington, and was honored in 1962 by being named Chairman of the NEA National Commission on Safety Education. Dr. Sudduth received honor awards from the Southern District, AAHPER, and the Tennessee Association for HPER.

The sincerity with which he advanced the field of physical education, the individual guidance he extended, the respect received from his friends, colleagues and students, and the ideals for which he stood will ever remain high in the memory of those who knew him.

Ralph H. Young (1889-1962)

Ralph H. Young, retired athletic director at Michigan State University, and member of the state legislature, was born on December 17, 1889 at Crown Point, Indiana. He died at age 72 of a coronary attack on January 23, 1962 in East Lansing.

His colorful career started in Indiana where he competed as a seventh and eighth grade pupil with the high school football team, the rules then permitting this. He subsequently played four years of football and basketball and was a weight man in track. Enrolling at the University of Chicago in 1912, Mr. Young played football under Coach Alonzo Stagg. After five terms at Chicago, he transferred to Washington and Jefferson College, Washington, Pennsylvania. Under Coach Bob Fowell he led the East in scoring as a fullback in 1913. He held the college records in shotput, discus, hammer, and javelin throw and sang in the glee club. He graduated from Washington and Jefferson with a B.S. degree in 1915.

Mr. Young's first position was that of head coach of football, track, and basketball at Depauw University, Greencastle, Indiana. After one year there, he transferred to Kalamazoo College where he spent seven years. World War I intervened, and in 1918 the U. S. Army Signal Corps sent him to the University of Michigan for training. Since student soldiers were eligible to play sports under wartime regulations, he was invited to report for football by Coach Fielding H. Yost and played part of that season as a 28-year-old tackle. After discharge from the army, he returned to Kalamazoo College. There his teams set an unparalleled record by winning 24 out of 28 Michigan Intercollegiate Athletic Association (MIAA) championships in the four major sports.

In the fall of 1923 Ralph Young became the athletic director, professor of physical education, and head coach of football and track at Michigan State. He coached football from 1923-27, and continued with track for 18 years. The pressure of administrative duties forced him to leave coaching in 1941. During his term at East Lansing, Michigan State grew from a small college of 2,143 students to a major university. Much of the athletic facilities and expanded curriculum were developed under his guidance. The new Spartan track was named in his honor. With MSU's admittance to the Western Conference in 1948, Ralph H. Young's efforts were apparent. In all he served MSU for 31 years, retiring from his directorship in 1954. After a year's leave of absence, he was named assistant director of alumni relations. Then, in 1956, he entered the realm of politics. At the time of his death he was in his third term as a Republican member of the state house of representatives. He served as chairman or member of several committees in the legislature.

Ralph Young's professional endeavors were broad in scope. He served as a charter member of the college football and track association in 1922. In 1926, together with Knute Rockne of Notre Dame, and Conrad Jennings of Marquette University, he formed the Central Collegiate Athletic Association. An assistant U. S. Olympic track coach in 1932, Mr. Young was chairman, thirty years later (1952), of the national collegiate Olympic fund campaign. In all, he was an administrator of college physical education and athletic programs from 1915 to 1956.

An Episcopalian by faith, he was active in the civic and social life of his community. Among his professional memberships were the NCPEA; the American Football Coaches Association; U. S. Olympic Association; Michigan AAU; and the Michigan Sports' Sages.

Of jolly, rotund Ralph H. Young, Governor John Swainson said, "Rep. Young . . . had respect in every area of Michigan. His work with young people represents a great contribution that will always be remembered." President Hannah of M.S.U. stated that Mr. Young did much ". . . to build the reputation of the university for excellence in athletics through his personal qualities of friendliness, patience, and honesty."

NOMINATIONS COMMITTEE

The Nominations Committee has complied with the constitutional requirements of the Association as well as with the Operating Code of the Committee in seeking candidates for the offices of president-elect, council member at large, and secretary-treasurer for 1964.

We have, in addition, made two recommendations to the Constitution Committee regarding recommended changes relative to the appointment of the committee and the number of candidates for each office. Each of these recommended changes was submitted to the membership for approval by the Constitution Committee at the first General Session of this Association at the 1964 meeting in Dallas. The recommended changes were approved and will be incorporated in the Constitution.

We recommend to the Association the following candidates for president-elect:

Burris Husman, University of Maryland
Henry Shenk, University of Kansas
Arthur Weston, Rice University

We recommend to the Association the following candidates for council member at large:

Charles Kovacic, University of California, Davis
Vernon Sprague, University of Oregon.

We recommend to the Association the following candidate for secretary-treasurer:

David O. Matthews, Illinois University

Respectfully submitted
R. E. Jamerson
Chairman

PUBLIC RELATIONS COMMITTEE

ACTIVITIES FOR THE YEAR

Since the present Operating Code for the Public Relations Committee of the NCPEAM had not been reviewed for three years, each member of the committee was mailed a copy of the code and asked to make any necessary revisions or amendments to the material in the code. Since no recommended changes were suggested by the members of the committee, none were presented to the chairman of the Operating Codes Committee for action by the Executive Council.

Since the committee for 1962 learned that a great many of our professional people were not aware of the NCPEAM and its activities, the committee decided to pursue one of the recommendations made by the committee last year relative to the contact of physical educators in many of the colleges and universities from which we do not have membership in our Association. The committee found well over 500 such schools.

Letters were written to the person in charge of physical education in each of 278 colleges and universities. The purposes of the letter were to (a) point out the existence of the NCPEAM, (b) emphasize the importance of NCPEAM as a professional organization, (c) point out the areas pursued by the NCPEAM for the advancement of physical education, (d) stress the high quality of the annual meetings along with the material included in the Proceedings, and (e) encourage the possibility of membership of those physical educators with high personal and professional qualifications. A copy of the letter is included with this report.

RECOMMENDATIONS

It is recommended that (a) the project for this year be continued by the committee next year and (b) the committee prepare an informational-type brochure or pamphlet about the NCPEAM. This type of publication could be used by the membership and publicity committees as well as by the public relations committee.

Respectfully submitted
Gene M. Asprey
Chairman

December 16, 1963

As a part of the function of the Public Relations Committee of the National College Physical Education Association, I am writing to physical educators in many colleges and universities to remind them about one of our most outstanding professional organizations, the NCPEA. It would be of mutual benefit to the Association and to professional people such as yourself if you would take some time to discuss the Association with your colleagues and friends in physical education.

The National College Physical Education Association, founded in 1897, is one of the most active and highly regarded professional organizations in the general field of health, physical education, recreation, and athletics. Its objectives relate to the advancement of physical education in institutions of higher learning, including: the basic instructional program; intercollegiate athletics; teacher education; and such other activities as may be assigned to a given college department.

The annual meeting of the NCPEA is of outstanding quality, and all of the discussions and activities are reported in the *Annual Proceedings* published by the AAHPER. The meeting this year will be held January 8-11 at the Baker Hotel in Dallas, Texas.

Though membership in the National College Physical Education Association is limited to those who possess such personal and professional qualifications as the Association deems necessary to maintain its high place among the leading professional organizations, I am sure that there are many qualified people who have not had the opportunity to consider the possibility of membership in the Association.

If you or any of your associates are interested in additional information relative to the NCPEA I suggest that you write to Dr. David O. Matthews, Secretary-Treasurer, 205 Huff Gymnasium, University of Illinois, Champaign-Urbana, Illinois.

Sincerely yours
Gene M. Asprey
Chairman

RESOLUTIONS COMMITTEE

1. Suggested changes in the operating code were made to the Executive Council through the Operating Codes Committee.
2. No proposed resolutions from the members have been submitted to the Committee. The Committee has submitted the following resolution to the Executive Council.

WHEREAS, this has been a most productive conference; and WHEREAS, the arrangements and accommodations have been so completely planned; BE IT RESOLVED that the NCPEAM extend its appreciation to: The Convention Manager, James Standifer, and his staff; the Convention Bureau of the City of Dallas; the Officers and program participants of the Association.

Respectfully submitted
Deane E. Richardson
Chairman

continuing committee

OPERATING CODES COMMITTEE

The Operating Manual of the NCPEAM was reviewed by members of the Operating Codes Committee. Selected sections of the Manual were carefully studied by the chairmen of all Standing Committees. Many minor changes in the Operating Manual were recommended to the Executive Council. The most extensive recommendations concerned the Operating Code of the Membership Committee in an attempt to streamline and improve the working capacity of this Committee. Several suggestions were also made relative to the procedures of the Executive Council.

Several issues and questionable items were referred to the Executive Council for discussion. It is recommended that the Operating Codes Committee be established as a Standing Committee.

Submitted by
Rich Donnelly
Chairman

CONFERENCE TIME AND SITE COMMITTEE

The Time and Site Committee has recommended that Minneapolis be the site of the 68th Annual Conference. Richard Donnelly, Director of the School of Physical Education, University of Minnesota, has agreed to provide the leadership for the Conference through the faculty of the Department of Physical Education for Men.

The recommendation for the site of the 69th Annual Conference was the Eastern Zone. No recommendation concerning the time for either conference was made.

Submitted by
Deane E. Richardson
Chairman

EDUCATIONAL TELEVISION COMMITTEE

This large committee found it impossible to hold a meeting of its members during this past year. All of its business, therefore, has been conducted by correspondence.

Requests for the results of the Committee's 1961 study, "Instructional Television in Physical Education," are still being received. The committee has continued to distribute the results of that study.

Members of the committee have visited or corresponded with the schools, colleges, and universities known to be using television in physical education and/or health education. In this way, the committee hopes to gather information concerning current developments in the use of television as an instructional tool in the schools and colleges. It purports to serve, at least temporarily, as a clearing house of information.

Libraries of recorded materials for use via television are now being developed in the United States. Video tapes in elementary school physical education, elementary school health instruction, and college health instruction are now available at: Great Plains Regional Instructional Television Library, University of Nebraska, Lincoln 8, Nebraska. Certainly, professional physical educators need such information, and an agency to gather and distribute the information is an important professional need today.

The Central Michigan Educational Television Council, Central Michigan University, Mt. Pleasant, Michigan, reports a research project in the use of instructional television in physical education. Professor Esther LaRowe hopes to have results available at the end of 1964. This is the only new study reported to your committee during the year.

The Educational Television Committee directs your attention to a course being offered via television by Dr. A. F. Brainard of St. Cloud State College, St. Cloud, Minnesota, as a new direction in our field. This course, "Current Concepts in Physical Education for the Classroom," is planned to help the elementary and secondary teacher of physical education to more adequately meet the needs of children in a well planned, broad, and varied program.

Students taking this course for credit will:

1. Complete assignments as directed in the syllabus.
2. Take a final examination.
3. Graduate students will complete an additional assignment.
4. Travel to a central location three (3) times for discussion with the instructor and other class members.

Dr. Brainard teaches his course over Station KTCA, Channel 2, St. Paul, Minnesota to a class of 140 students. This may well be part of the future look of inservice education, extension work, and graduate study in health and physical education.

The Educational Television Committee has volunteered its services to the National Office of the American Association for Health, Physical Education, and Recreation to gather all the information available concerning instructional and educational television in health, physical education, and recreation. As of this writing, no response has been forthcoming. It seems wise, however, to cooperate with the National Office in compiling a mailing list of schools and colleges using instructional television, the results of research, and lists of recorded materials available for television, and in distributing this information.

The Midwest Program on Airborne Television Instruction, Purdue University, Lafayette, Indiana, has been encouraged by your committee to include physical education and/or health education in its offering. The committee has offered its services as a consultant in the procurement and development of appropriate television materials. Dr. Ben A. Bonhorst, Director of the Educational Services Division, has acknowledged our recommendation and assures us that it will be included among the items reviewed by the Advisory Commission on future curriculum developments in MPATI. Our committee encourages the members of the National College Physical Education Association, especially those in the Midwest, to seek every opportunity to encourage MPATI to develop materials in health and physical education.

In the latter part of this year, your committee became aware of the lack of information concerning the use of instructional television by the colleges and universities in the United States. It decided, therefore, to conduct a survey to locate those colleges and universities making some use of television in health and physical education. An appropriate questionnaire was developed and approved by the committee. Each committee member was assigned the responsibility for distribution of the questionnaire to the institutions of higher education in several states in his section of the country. Mailing lists were constructed from the Blue Book of Athletics and the Educational Directory for Higher Education, published by the U. S. Department of Health, Education, and Welfare. While returns are not complete as of this writing, the following information is available:

Returns have been received from 473 colleges and universities covering 35 states and Canada. Of the institutions represented by these returns, 107 or 22.6 percent make some use of television in physical education, health education, and/or athletics. These uses varied from televising home basketball games via closed circuit television at one college having a very small seating capacity in its gymnasium so that all students could see the games, to the televising of lessons in professional preparation in physical education. Television is used by at least one college or university in 28 of the 35 states and in Canada. Apparently the use of this relatively new electronic device in physical education is not limited to a particular geographical section of our country.

The following is a summary of the information provided by the 107 colleges and universities using television:

No. of Colleges and Universities	Types of Telecasts
67	Athletic events and contests
41	Public relations shows
27	Educational programs for general community in physical education
12	Educational programs for general community in health instruction
8	Professional education for in-class viewing
8	Professional education for out-of-class viewing
8	Physical education for out-of-class viewing
7	Health instruction for in-class viewing
4	Health instruction for out-of-class viewing
3	Physical education for in-class viewing

No. of Colleges and Universities	Sources of Materials Telecast
14	Design and produce local telecasts
8	Use recorded materials (films, kinescopes, video tapes)

No. of Colleges and Universities	Type of Facility Used
54	Local commercial station
13	Closed circuit television system
12	Institution's educational TV station
6	Local educational TV station

In addition to the above data, the questionnaires received have contained many comments indicating that television is to become increasingly important in many colleges and university programs of health and physical education. Some typical examples follow:

> We have been requested to do a weekly television program of physical education for the general community.
>
> Our university now has its own TV Office and we should be using it in 1964 or 1965.

We are now beginning to plan for extension work in physical education over closed circuit television with another university.

Our new building is designed for use of closed circuit television.

A list is now being constructed of all colleges and universities reporting a use of television in health and/or physical education. The completed list will be available to all interested persons through the committee by May 1, 1964.

On the basis of its work during this year, the Educational Television Committee recommends:

1. That further study be conducted by the committee in the use of television in physical education and health education.
2. That the NCPEAM and its members encourage and conduct research studies in the utilization of instructional television in physical education and health education.
3. That the NCPEAM and its members encourage schools and colleges to develop and exploit the public service programs on local commercial television stations rather than allowing "pseudo-physical educators" to commercialize on the physical fitness interests of the general public.
4. That the NCPEAM through this committee make a concerted effort to collect, consolidate, and distribute the research and information concerning the development of educational television in health and physical education.
5. That the NCPEAM through this committee volunteer to work with the National Office of the AAHPER on the development and use of television in physical education and health education.

Respectfully submitted
C. G. Hixson
Chairman

RESEARCH NEEDS COMMITTEE

Last year in San Francisco, one of the research section meetings was devoted to the possibilities of cooperative research by institutions represented in the NCPEAM. This topic was essentially an outgrowth of the Alley Report with its various ramifications. At that meeting you may recall that presentations were made on: (a) the need for cooperative research; (b) possible methods of cooperation; (c) the areas of needed research; and (d) the problems involved in cooperative research. Following the presentations, those in attendance at the meeting were divided up into so-called "buzz-groups" for the purpose of discussing the feasibility of cooperative research along with methods of implementation and direction. While the comments of the participants ranged from highly favorable to highly critical, the concensus of the group leaders was that the response to the idea of cooperative research by the NCPEAM was favorable.

At an Executive Council meeting in San Francisco, past president Dick Jamerson proposed that a Standing Committee on Research be established by the NCPEAM and, further, it was suggested that potential membership and a policy of membership rotation be studied.

At the Executive Council meeting in Minneapolis, the plan for a Standing Committee on Research was again discussed. The Executive Council voted to bring the proposal for the establishment of such a committee to the membership for a vote at the Dallas meeting.

The committee, which would be appointed by the president and approved by the Executive Council, would have the following basic functions:

1. Identify the major areas for needed research by the NCPEAM.
2. Identify priority problems within the list of major areas for needed research.
3. Initiate research projects which lend themselves well to a multi-institutional approach.

The establishment of a Standing Committee on Research would be a significant step toward enabling the NCPEAM to function on a year-around basis and to assume a more important voice in the field of physical education.

Mr. President, I move that a Standing Committee on Research be created by the NCPEAM.

Respectfully submitted
Fred Roby
Chairman

JOINT COMMITTEE ON PHYSICAL EDUCATION AND ATHLETICS

The American Association for Health, Physical Education, and Recreation has just published the report of the Second National Athletic Directors Conference. This booklet summarizes the conclusions agreed upon by the discussion groups and can be obtained from the AAHPER in Washington, D. C.

A permanent Joint Committee on Physical Education and Athletics was formed in January 1945 by three national organizations: the American Association for Health, Physical Education, and Recreation; the College Physical Education Association; and the National Collegiate Athletic Association.

The functions of this Joint Committee are:

1. To study, discuss, and make recommendations on problems of mutual interest in the field of physical education and athletics for men.
2. To formulate plans for the composition and distribution of factual information of national interest pertaining to physical education and athletics.
3. To gather information and make studies of trends in physical education and athletics which are of common interest to the organizations represented.
4. To act as an agency for interassociation relationships.

Each of the parent organizations appoints three men to serve on the Committee for terms of three years.

The Joint Committee considered the idea of a national conference for athletic directors for several years. The need for such a national conference has been apparent for some time since athletic directors, in general, are only products of experience. There are no training courses or separate and distinct areas of knowledge or literature available for the development of athletic directors. The Joint Committee held the first National Athletic Conference in Louisville, Kentucky, March 21-23, 1959. Because of the success of the first National Conference, a second conference was scheduled again in Louisville, Kentucky, March 22-23, 1962. Without the encouragement and support of the three parent organizations, the Conference could not have materialized.

Approximately 200 athletic directors of colleges and universities from most sections of the United States were in attendance for the second National Conference for Directors of Athletics held at the Sheraton Hotel in Louisville, Kentucky on March 22-23, 1962. The Conference was sponsored by a Joint Committee representing the American Association for Health, Physical Education, and Recreation; the College Physical Education Association; and the National Collegiate Athletic Association. James Long, University of Toledo; Ray Duncan, West Virginia University; and Roswell Merrick represented AAHPER. Lysle Butler, Oberlin College; Martin Rogers, Brockport State Teachers College; and Mike Gary, Western Michigan University, represented the NCPEAM. The NCAA sent Mox Weber, Hamilton College; Edwin Kimball, Brigham Young University; and the conference chairman, Richard Larkins, Ohio State University.

The conference theme was "The re-emphasis of the educational values of athletics: the responsibility of the director of athletics"; and the stated objective was "To determine how the athletic administrator can strengthen the program of intercollegiate athletics in his own institution." The major areas of concern dealt with were the following:

1. The relation of athletics to physical education and to general education.
2. The aims, objectives, and purposes of athletics.
3. The responsibility of the director to his staff, faculty, administration, and the general student body.

The statement of General Principles as given in the Report is of especial interest:

We believe that instructional, recreational, and competitive opportunities should be extended to every man and woman in the college and university through the following programs:

1. A sound basic physical activity instructional program
2. A broad recreational program
3. An extensive intramural program
4. A sound intercollegiate athletic program.

This involves providing a broad program of activities, adequate facilities and equipment, qualified leadership, and sufficient financial support. To promote these activities there must be sympathetic encouragement and understanding from the university administration and faculty. The welfare and total fitness of all students should be the leading principle in the administration of the programs.

These programs should be conducted by an organized framework similar to other administrative divisions within the university. The administration should remain in an educational context and regular committee structure and faculty athletic advisory councils should be utilized. All coaches and athletic administrative personnel should maintain the standards of personal and professional integrity, instructional skill, and regard for the personality of the student as expected of other teaching personnel. It is desirable that the college and university adopt sound educational policies regarding the program of intercollegiate athletics.

All coaching and athletic administrative personnel should be full-time employees of the university, preferably in the department of physical education and athletics. We should recommend and employ only professionally prepared teaching personnel. Occasionally it may be desirable to utilize specialists as resource people and consultants, but they should not be placed in control of the program.

All coaches and athletic administrative personnel should provide and participate in a continuous program of school-community relations designed to emphasize the educational, health, social, and recreational values as integral parts of the educational curriculum.

The Joint Committee will continue to serve the three parent organizations.

Respectfully submitted
L. K. Butler
Chairman

JOINT COMMITTEE ON PHYSICAL EDUCATION FOR COLLEGE MEN AND WOMEN

The members of the NCPEAM Joint Committee met with the combined AAHPER, NAPECW group on May 3, 1963 in Minneapolis at the AAHPER meetings. The following items of business were conducted:

1. Those individuals who participated in the Washington Conference (October 21-24, 1962) who were assigned specific duties re encouraging the holding of regional conferences on Physical Education for College Students; a Discussion Guide, would continue to serve until the task is accomplished.
2. Continue preparation of the manuscript *The Case for Physical Education* with the hope that it will be ready shortly after January 1964.
3. Study of the status and work of the President's Council on Physical Fitness, and its relationship to the three professional organizations represented on the Joint Committee.
4. Study of the role of the U. S. Government re support of U. S. Olympic teams.
5. That the Committee concern itself with cooperation in finalizing action on the new publication, *Quest*. This has been accomplished.
6. That the Committee encourage all three associations to contribute financial support to joint projects.

Respectfully submitted
Charles R. Kovacic
Chairman

ALPHABETICAL ROLL OF MEMBERS 1964

*Attended 1964 Convention (1) Past President (2) Past Secretary-Treasurer

HONORARY MEMBERS

*Alderson, Curtis J., Ed.D. (1950-59)
University of Texas
Austin, Texas

Altman, George J., M.Ed. (1936-55)
202 Belmont
Los Gatos, California

Bilheimer, C. E., M.Ed. (1930-54)
Gettysburg College
Gettysburg, Pennsylvania

Brown, Hubert E., Ph.D. (1947-58)
16516 Camelia Terrace
Los Gatos, California

Brownell, Clifford L., Ph.D. (1930-61)
25 Woodford Road
Avon, Connecticut

Bullock, James E., M.A. (1936-60)
Williams College
Williamstown, Massachusetts

Campbell, Walter, M.Ed. (1928-54)
University of Rochester
Rochester, New York

Clapp, Raymond C., M.D. (1906-45)
Box 1972
Estes Park, Colorado

Evans, Harold M., B.P.E. (1941-60)
25 Prospect St.
Falmouth, Massachusetts

Fetzer, Robert A., M.A. (1925-52)
University of North Carolina
Chapel Hill, North Carolina

Gauthier, George E., B.S. (1925-55)
Ohio Wesleyan University
Delaware, Ohio

Hansen, Canute, D.D.S. (1926-55)
149-45 Northern Blvd.
Flushing 54, New York

Harmon, John M., Ed.D. (1934-59)
154 Nobscot Rd., R.F.D. #1
Sudbury, Massachusetts

House, Howard H., Ph.D. (1952-55)
Box 203
Asotin, Washington

(1) Keller, Louis F., Ph.D. (1923-59)
1340 Keston St.
St. Paul 6, Minnesota

Kiphuth, Robert J. H., B.S. (1932-59)
Yale University
New Haven, Connecticut

Kirkpatrick, T. Bruce, M.A. (1932-48)
249 Washington Ave.
Kingston, New York

(1) Livingston, Walter J., B.S. (1922-52)
333 12th Ave.
Indian Rocks Beach, Florida

Locke, Edwin A., M.D. (1937-46)
Wilton, New Hampshire

(1) Luehring, Fred W., Ph.D. (1920-51)
314 N. Chester Rd.
Swarthmore, Pennsylvania

(1) Marsh, Allison W., M.Ed. (1922-58)
62 Hillcrest Place
Amherst, Massachusetts

Masley, A. L., M.A. (1945-60)
University of Wisconsin
Madison, Wisconsin

(1) (2) Metcalf, Thomas N., M.A. (1920-56)
1208 San Miguel
Santa Barbara, California

(1) Mitchell, Elmer D., Ph.D. (1931-58)
University of Michigan
Ann Arbor, Michigan

Nash, Jay B., Ph.D. (1927-52)
40 East 10th St.
New York, New York

(1) Nichols, John H., M.D. (1918-55)
Oberlin College
Oberlin, Ohio

Olds, Lloyd W., Ph.D. (1931-62)
Eastern Michigan College
Ypsilanti, Michigan

Olson, Carl, B.S. (1933-59)
515 Glasgow Road
Pittsburgh, Pennsylvania

Patty, Willard W., Ph.D. (1949-58)
1 Artists Drive
Nashville, Indiana

(1) Prettyman, Albert I., B.P.E. (1920-49)
Hamilton College
Clinton, New York

Raabe, Howard W., M.S. (1950-57)
1148 S.E. Powell Blvd.
Portland, Oregon

Rider, George L., B.A. (1921-60)
Miami University
Oxford, Ohio

Rockafeller, Harry J., P.B. (1932-62)
Rutgers University
New Brunswick, New Jersey

(1) (2) Scott, Harry A., Ph.D. (1923-59)
Box 4726
Carmel, California

Stagg, Amos A., Sr., B.A. (1920-47)
127 W. Euclid Ave.
Stockton, California

Stagg, Amos A., Jr., M.A. (1941-61)
2113 Magnolia Road
Homewood, Illinois

(1) Staley, Seward C., Ph.D. (1927-61)
University of Illinois
Urbana, Illinois

Strehle, Robert L., M.A. (1958-60)
Pomona College
Claremont, California

Swain, Leslie E., M.A. (1927-43)
Tree Tops
Craigville, Massachusetts

Toomey, Irving F., B.S. (1936-57)
University of California
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Twitchell, Albert W., M.Ed. (1953-61)
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Wallace, Stanley M., B.S. (1932-59)
University of Maine
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Whitaker, Berry M., B.A. (1949-59)
University of Texas
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Hobart College
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Johns Hopkins University
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Montclair State Teachers College
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Bronx, New York

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Albion College
Albion, Michigan

ISMAIL, A. H., H.S.D. (1960)
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Philadelphia, Pennsylvania

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Whittier, California

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Minot State College
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San Jose State College
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Pomona College
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University of Illinois
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